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SUMMARY

Detailed flow measurements were taken inside an isolated axial compressor rotor operating subsonically near peak efficiency. These laser anemometer measurements were made with two inlet velocity profiles. One profile consisted of an unmodified baseline flow, and the second profile was distorted by placing axisymmetric screens on the hub and shroud well upstream of the rotor. A detailed comparison in the rotor relative reference frame between a Navier-Stokes solver and the measured experimental results showed good agreement between the predicted and measured flows. A primary flow is defined in the rotor and deviations from this primary flow for each inlet flow condition are identified. A comparison between the two flow deviations and the computed predictions is made to assess the development of a passage vortex due to the distortion of the inlet flow. Computed predictions indicate that a distorted inlet profile has a minimal effect on the development of the flow in the rotor passage and the resulting passage vortex.

I. INTRODUCTION

Current turbomachinery design techniques are based, to a large extent, on a large body of empirical data accumulated over the past 50 years. In a normal design procedure this data is used in conjunction with various design and analysis codes to produce an initial design. After this process, the design is normally fabricated, tested, modified, and retested as necessary until design specifications are met. While this process has provided a number of excellent designs, it tends to be difficult, lengthy, and expensive. A better understanding of the flow processes occurring inside a turbomachine would not only improve the reliability of the design process but would also improve the performance of the machine.

Recently, a program to study the effects of axisymmetric inlet distortion in a subsonically operating axial flow compressor rotor was completed by the US Army Propulsion Directorate in Cleveland, Ohio. Specifically, the study endeavored to examine certain "secondary flows" (ref. 1) generated in the rotor. The ultimate goals were: (1) to provide detailed quality data inside the rotor passage for an improved understanding of the flow physics and (2) to explore the effects of axisymmetric inlet distortion on the development of a compressor rotor flow field.

Reference 2 provides the results of this experimental study of the flow phenomena observed and the preliminary results from a Navier-Stokes solver that was used to predict the flows that would occur in the test compressor rotor.

The purpose of the present report is to present more detailed results from the Navier-Stokes predictions, additional comparisons between experimental results and computed predictions, and additional experimental results.

Two inlet boundary conditions were observed (fig. 1). One was a "uniform" or baseline inlet velocity profile with no unusually thick boundary layers. The other flow condition was at the same operating point (inlet flow coefficient value) with artificially enhanced endwall boundary layers (thickened boundary layers). These boundary layers were generated upstream of the rotor by positioning screens that extended partially into the inlet flow passage. These two inlet flow fields were compared and their differences were noted. These results were compared with a state-of-the-art three-dimensional Navier-Stokes solver. This solver includes endwall and blade boundary layer effects and has been used at the NASA Lewis Research Center to accurately model the velocity fields of several compressor designs.

NOMENCLATURE

AN	relative flow angle
C_v	confidence interval
DSPD	design speed
N	number of laser measurements
N_b	number of blades
N_{wp}	number of windows per passage
NME	number of measurements per average passage window
P,p	pressure
r,θ,z	cylindrical coordinate system
R,r	radius
Re	Reynolds number
t	time
T	temperature
u,v,w	velocity components
V_θ	tangential velocity
W	relative velocity
x,y,z	Cartesian coordinate system
Z	desired confidence interval
β	relative flow angle
ρ	density
σ	standard deviation
ω	rotor angular rotation

Superscript:

$\bar{}$	vector

Subscripts:

a	artificially enhanced boundary layer inlet case
av	average
b	baseline inlet case
bi	biased
o	stagnation
pav	passage average
p	primary flow
s	secondary flow
1,2	inlet, outlet conditions

II. APPARATUS AND FACILITIES

A. Introduction

There are four broad areas that will be presented in this section:

(a) the laser anemometer system which includes the optics, flow seeding, and probe volume positioning system,
(b) the data acquisition/reduction system which includes the conventional pitot static instrumentation,
(c) the test facility,
(d) and the compressor rotor, its design and specifications.

Previous publications have discussed, extensively, all of the areas listed above. Therefore, this section will endeavor to present only the pertinent features of these systems.

B. The Laser Anemometer System

1. Optical system.—There are several types of laser anemometer systems. The system used at NASA Lewis single stage axial flow compressor facility is a "fringe type" system that was developed in-house. There are a number of excellent publications (refs. 3 to 5) describing the optical operation of the laser-fringe anemometer (laser doppler velocimeter).

The laser anemometer system used at NASA Lewis for this program has been described in detail in reference 2 and was a highly modified version of the system described in references 6 to 8. In it's modified form, it remained a fringe type, on axis, backscatter system. The most important difference between the current system and previous systems was the inclusion of a frequency shifter for both probe volumes. The velocity components measured are in or near the axial/tangential planes and the components resolved are the tangential and the axial velocity components. The resulting three beam system was designed to create two separate collocated probe volumes. During the current program, the frequency shifted beam was common to both probe volumes. Only one component of velocity was measured at any given time.

The argon-ion laser was operated at a power level varying between 1.5 and 2.5 W to generate a beam at a wavelength of 514.5 nm. The variation in output power of the laser over the test period was the result of variations in input electric power. The laser was always operated at its highest available power output. Even so, unavoidable losses in the optical system reduced the actual power delivered to the probe volume to less than 0.8 W. This resulted in marginal operation in areas near the hub, near the trailing edge, and near the rear lip of the observation window.

Beam polarization was achieved within $\pm 4°$. The frequency shifted beam delivered approximately 0.1 W less power (0.25 versus 0.35 W) to a probe volume than the unshifted beam. This number varied somewhat with the available laser power output and with adjustment of the Bragg cell. The frequency shifter changes the common beam frequency by 40 Mhz. The system was normally operated in the direct backscatter mode although the capability for operation in the fluorescent mode existed.

The final optical element in the beam's path was a 3.2 mm thick window made of chemically strengthened glass that extended from 1.5 blade chord lengths upstream to 1 chord length downstream of the rotor blades. The window covered a circumferential width of 20° or two rotor pitches. It conformed with the outer flow path in both the axial (streamwise) and tangential directions.

The probe volume was an ellipsoidal shaped region approximately 125 μm wide and 2 mm long. During the daily operation, the probe volume position was accurately determined prior to the start of the days data acquisition phase.

To obtain data the light scattered from the probe volume is collected by a set of focusing lenses. It is focused onto a 125 μm diameter pinhole on mounted at the face of a photomultiplier tube. Table I provides the design probe volume specifications and the calculated probe volume specifications from the measured crossing angles.

2. Positioning system.—The entire optical system is mounted on top of a mobile metal cart. When rolled into position, the cart is bolted to the floor to insure a firm base for the laser anemometer. Mounted on the cart are three commercially available translating stages. These stages provide more than 45 cm of movement in three orthogonal directions. To further minimize potential blade blockage effects, the final focusing lens was mounted on a goniometer stage that allowed passage observation along an off radial line that was in a plane defined by a constant axial location.

3. Flow seeding.—Liquid seed particles, nominally 0.5 μm in diameter, are injected into the flow through a 6 mm diameter tube located 35 cm upstream of the rotor (approximately 8.75 rotor chord lengths).

The seed particle composition was selected to retain the capability to use the fluorescent dye technique (ref. 9). The selected seed material was a 0.02 molar solution of Rhodamine 6G in a 50–50 mixture by volume of ethylene glycol and benzyl alcohol. Although this fluorescent capability was retained; in the passage areas away from the endwall regions, direct light scattering from the seed was observed.

C. Data Acquisition and Reduction

The data acquisition system consisted of the optical system to acquire the signal, a signal processor to do preliminary processing and validation of the data, a shaft angle encoder to provide information on the circumferential (or tangential) position of the compressor rotor and a minicomputer to control the data acquisition and do preliminary post processing. A laser buffer interface received the signal from the signal processor and the shaft angle encoder, combined them and sent them to the minicomputer. The signal processor, shaft angle encoder, and minicomputer are described below and in reference 2.

1. The minicomputer.—The current minicomputer uses the VMS operating system and is described in some detail in reference 10. Typical data acquisition sessions required the use of the machine simultaneously in at least three ways: (1) data acquisition, (2) probe volume positioning, and (3) preliminary data screening and observation.

2. The signal processor.—Photomultiplier tube (PMT) signal bursts were processed by a commercially available counter type processor (ref. 11). This processor contains a 250 Mhz clock accurate to within ± 1 nsec.

A validated signal representative of the time to cross eight fringes and, thus, the appropriate velocity component, is sent to the minicomputer along with a signal from the electronic shaft angle encoder. This latter signal defines the circumferential position of the rotor when the PMT signal burst was processed. Previously provided to the minicomputer is information concerning the velocity component measured, probe volume axial and radial position, and inlet air temperature.

3. Electronic shaft angle encoder.—This device provides the current angular position independent of the rotor speed with the only required input being an accurate once-per-rev pulse (OPR). It has been previously described in detail in references 6 to 8. The encoded angular position of the rotor is produced by a counter that is clocked by a frequency synthesizer. The synthesizer frequency is adjusted as necessary each revolution so that the number of counts per revolution remains constant.

An operational requirement of the shaft angle encoder is that the fractional change in the angular velocity of the rotor for each revolution be small compared to the desired resolution in the angular position expressed as a fractional change in the angular position expressed as a fractional part of one revolution.

The long term (1 sec) speed drift in the facility is about 0.3 percent. However, the rev-to-rev speed changes are less than one count. For the data taken during this study, the encoder was set to yield a resolution of 50 angular positions per blade passage (suction surface to suction surface).

Note that the velocity measurements do not occur at discrete shaft positions, but rather are made anywhere within an interval between adjacent shaft positions marked by the shaft angle encoder. This interval is along an arc in the flow passage at a given radial/axial location. For the data taken in this experiment, this arc length varies between 0.621 mm at the hub and 0.896 mm at the rotor tip.

At each radial and axial position surveyed, data are recorded at 1100 different shaft positions. These shaft positions are distributed as 50 positions per passage across 22 consecutive passages. The velocity and flow angle are calculated at each position from runs made at the two different beam orientations. The velocity distribution across the measured 22 passages is considered to be 22 separate observations of the flow in an average blade passage.

Velocities and flow angles at corresponding points relative to the blade in each individual blade passage are averaged together to yield a spatially-ensemble averaged blade-to-blade velocity and flow angle distribution; i.e., an "average passage" velocity field.

4. Conventional instrumentation.—The conventional pitot-static instrumentation available in the facility was used to set and monitor the rotor operating conditions. It was also used to provide information for the analytical solution that was subsequently used for comparison and analysis of the experimental data. This conventional data and the rig operating conditions were monitored and recorded using the center-wide "Escort" data acquisition system (ref. 12).

Surveys of flow conditions upstream and downstream were made on a regular basis. The survey instrumentation consisted of total pressure, static pressure, total temperature, and flow angle. Survey data was taken at nine radial locations and two axial locations.

Total pressure, total temperature, and flow angle were measured with a combination cobra probe similar to the one shown in figure 2(a). The static pressure was measured with an 18° "C-shaped" wedge probe similar to that shown in figure 2(b). Each probe was positioned with a null-balancing, stream-directional-sensitive control system that automatically aligned the probe to the direction of flow. The material used for the thermocouples was iron-constantan. The probes were calibrated to a freestream Mach number of 0.9 in a high speed wind tunnel. Two combination cobra and two static wedge probes were used both upstream and downstream of the rotor. A calibrated flat-plate orifice was used to determine the flow rate and an electronic speed counter, in conjunction with a magnetic pickup, was used to measure rotative speed (RPM).

Data uncertainties due to the inherent errors of the instrumentation and recording systems are given in table II.

D. Test Facility

The entire investigation was carried out at NASA Lewis single stage compressor test facility. A schematic of this research facility is shown in figure 3. It is described in detail in reference 13.

The drive motor for the system consists of a 3000 HP electric motor with a variable-frequency power supply. Motor speed can be varied from 400 to 3600 rpm. The motor is coupled to the compressor rotor through a 5.52 ratio gear box that increases the compressor rotor speed to an approximate maximum of 19 850 rpm (the program rotor design speed was 17 189 rpm). Ambient, unconditioned air was the working fluid. It was drawn in from the roof of the building and exhausted through the basement of the building. The airflow rate was measured using a thin plate orifice and was controlled with a downstream collector valve.

E. Research Compressor

The aerodynamic and mechanical design of the compressor used for this experiment is presented in detail in reference 13. Aerodynamic performance is presented in reference 14. The design parameters are summarized in table III. This 36 blade rotor was designed as the first stage rotor for an eight stage compressor with a first stage design pressure ratio of 1.82. The blades were designed to be multiple circular arc blade profiles. Figure 4 shows a meridional plane view of the compressor flow path and figure 5 shows the rotor blade sections at three radial locations: near the hub, midspan, and near the tip. Table IV provides axial and radial geometry for both the endwalls and the blade leading and trailing edges. Rotor design tip clearance was 0.5 mm.

III. COMPUTATIONAL DEVELOPMENT

A. Introduction

Recently a fully three-dimensional Navier-Stokes code has become available at NASA Lewis. This program, created in-house by Dr. R.V. Chima, was specifically developed for the analysis of turbomachinery blade rows and other internal flows (ref. 15). It has been used for the analysis of both the baseline and the enhanced endwall test configurations of this investigation. A more detailed presentation is available in references 15 and 16.

The solver has a finite difference formulation and uses a Baldwin-Lomax algebraic two layer eddy viscosity model (ref. 19) applied on the cross channel planes.

B. Computational Grid

This Navier-Stokes solver requires the generation of a number of computational grids spanning various portions of the solution space. Initially, a coarse, equally spaced, meridional grid is generated between the supplied hub and shroud contours. The blade geometry is interpolated onto this coarse grid. An in-house code, TCGRID (ref. 17), generates a series of two-dimensional blade-to-blade grids utilizing a scheme developed by Sorenson (ref. 18). This series of two-dimensional C-type grids are reclustered spanwise to form a fully three-dimensional grid. The two-dimensional grids are arranged along the radial stacking line and stretched so that the blade shape remains constant and the angular pitch of the outer periodic boundary remains constant. Once the grid is generated, the coordinates are transformed from cylindrical to Cartesian coordinates for the solution.

Figure 4 shows a meridional view of the axial/radial planes where the C-type grids were generated and figure 6 shows several of the blade-to-blade grids that were used in this solution. Grid density was 185 by 40 by 49 where there were 185 grid points in the meridional or "C" direction, 40 points from blade surface to midpitch, and 49 from hub to shroud.

C. Boundary Conditions

At the inlet, total temperature $T_{0,ref}$ is specified as a constant. A radial distribution of total pressure ($P_0/P_{0,ref}$) is specified as appropriate for an inlet boundary layer with a given

thickness and a power-law profile. The inlet whirl distribution, rv_θ, is also specified. For both test cases, measured inlet survey data as shown in figure 7(a) were input to the solver. Measured exit survey data are shown in figure 7(b).

The hub exit static pressure is specified and (ρ, ρu, ρv, ρw) are extrapolated. The exit radial pressure distribution is found by integrating the axisymmetric radial momentum equation:

$$\frac{dp}{dr} = \frac{\rho v_\theta^2}{r} = \frac{\rho}{r^3}(vz - wy)^2 \tag{1}$$

Sidewalls and the trailing edge are treated as periodic boundaries. On the blade surfaces the no slip boundary conditions were used. Blade surface pressures are found from the normal momentum equation.

D. Application of the Solver

Experimental information of the inlet flow conditions was used as inputs to the solver. These initial experimental conditions are density, the velocity vector, and the internal energy at the measured inlet radial locations. All input conditions were nondimensionalized by the inlet stagnation speed of sound and stagnation density. The inlet endwall boundary layers were assumed to be fully turbulent.

The code was then exercised for a number of mass flows to generate a partial operating map for the compressor for both test configurations. Flow points on the computed maps were compared to the test operating conditions. The results at the same relative position for the experimental flow also were compared. Mass flows for the baseline test case, 10.727 kg/sec and the enhanced endwall, 10.545 kg/sec compared favorably with the mass flows calculated using the Chima solver, 10.661 kg/sec for the baseline and 10.904 kg/sec for the enhanced endwall. Since the computed mass flows do not match exactly, slight differences in velocity magnitudes and flow angles can be expected.

Mass was conserved to within 0.1 percent between inlet and exit conditions for all calculations for both inlet test cases. Both test cases were carried through at least 2040 iterations, during which maximum residuals decreased by approximately two orders of magnitude. Both maximum and average residual values had reached minimum values by 1700 iterations and solutions were considered final by 2040 iterations.

The information in these solutions were interpolated from the "C" grid to the axial/radial locations where data was acquired using a spline fitting routine from reference 20. The information was then plotted using the same software that was used to display the acquired experimental results.

Finally, it should be noted that the current solver contains no provisions for tip clearance. Therefore, differences between computed flow solutions and measured flow conditions can be expected in regions near the shroud where clearance effects might be observed. However, since data was not successfully acquired beyond 90 percent span, this discrepancy was not expected to adversely affect the comparisons between experimental and predicted results.

IV. EXPERIMENTAL PROCEDURE

A. Introduction

The primary goal of the current research was to explore the effects of axisymmetric inlet flow radial distortion on the performance of a typical compressor rotor. To accomplish this, it was necessary to minimize the possibility of extraneous flow features developing in the passage due to facility instabilities which could be produced by small variations in rotor speed. Operation at a flow rate slightly lower than the peak efficiency point would tend to stabilize the flow and still minimize off-design flow abnormalities. Therefore, the flow condition analyzed was specified to be near the 60 percent design rpm (60 percent DSPD) peak efficiency point. This was approximately 10 313 rpm.

As has been previously mentioned, two flow conditions were examined; a uniform inlet flow and an axisymmetrically distorted or "artificially enhanced endwall boundary layer" inlet flow. The first, or nominal, flow condition was specified to be at the near peak efficiency, "smooth" inlet velocity profile, 60 percent DSPD flow condition. Then, for the second flow configuration, axisymmetric screens were placed on the hub and shroud, approximately 25 cm upstream of the rotor. These screens had the effect of generating a nonuniform inlet profile, thereby developing the thicker inlet endwall boundary layers that enhance the passage vortex. These blocking screens consisted of a coarse mesh (four wires per 2.54 cm mesh) extending 3.05 cm from each endwall into the flow. A finer mesh (eight wires per 2.54 cm) screen was laid on top of the coarse screens and these extended from the endwalls approximately 0.76 cm into the flow. The mesh design used has been shown to produce a smoothly varying inlet velocity profile. The selected screen coarseness was chosen to provide an inlet profile severe enough to provide substantial difference between the two test cases and mild enough to allow stable operation of the rotor. Further, the velocity profiles needed to be mild enough to allow a computational solution to be obtained.

Figure 7(a) shows profiles of the absolute total velocity, V_{to} and absolute flow angle, angle, as surveyed by the aerodynamic probes at the upstream aerodynamic survey location. The profiles were selected to be different enough to generate a measurable passage vortex but moderate enough to allow smooth operation of the rotor and successful modeling on the available analysis codes. Flow conditions were matched by adjusting the flow coefficients, as discussed by Wagner et al. (ref. 21). Here, the area average inlet axial velocity was used to define the flow coefficient.

Aerodynamic data consisting of flow angles, total pressures, static pressures, and temperatures were acquired at two locations; one upstream and one downstream of the rotor. The upstream location was 2.54 cm upstream of the hub/rotor leading edge intersection and the downstream location was at 10.668 cm downstream of the hub/rotor leading edge intersection. Data acquired at the aerodynamic survey location was used for several purposes. First, this data provided the inlet pressure profile and exit static pressure required as inputs for the flow solver used in the analysis portion of this project. Second, these profiles were used to adjust the calculated flow coefficients. Lastly, regular surveys during the data acquisition period were used to help maintain constant rig flow conditions.

A comparison between the two velocity profiles shows a difference of over 5 m/sec at the midspan of the passage with the thickened or artificially enhanced boundary layer velocities higher. The situation is reversed closer to the endwalls with the baseline profile over 6 m/sec

larger near the hub endwall and over 4 m/sec higher on the shroud side of the passage. This difference in the inlet velocity profile is the desired difference to generate the passage vortex that is the object of this research. The differences here are of the order of 10 percent of the free-stream velocities.

Differences in the inlet flow angle measurements between the two velocity profiles is small except near the shroud. There is some indication that the enhanced boundary layer is turned more at the midspan than the baseline with the converse being true at the endwalls. However, with the exception of the two measurements nearest the shroud, the differences are very small; less than 0.3°. For both profiles, a turning of the inlet flow from axial near the hub to about 2° near the tip. The cause of this is unclear. There is nothing upstream of the rotor to cause any turning of the flow. Further, while laser anemometer measurements indicate some turning of the flow upstream of the rotor, the profile is of a more constant magnitude from hub to shroud rather than one of increasing magnitude. It seems unlikely that the rotor would affect the flow this far upstream. Therefore, the most likely cause of this profile is a small, systematic error in the measurement of the flow; perhaps due to the inlet probes not tracking radially inward during a survey.

Overall results of the surveys at the aerodynamic exit are shown in figure 7(b). These results show the enhanced boundary layer case with only slightly higher exit velocities, less than 3 m/sec, over most of the flow passage. It is difficult to see any great differences between the two test flow conditions. However, the enhanced boundary layer case seems to be slightly more turned near the endwalls than at the midspan than the baseline case. Maximum differences are of the order of 2°. This increased turning would be consistent with the generation of the passage vortex.

Laser anemometer data was acquired at eight different chord locations (fig. 8), the farthest upstream was at the upstream aero-survey location and the farthest downstream was at the 105 percent chord location. At each of these locations, data was taken at 10 spanwise locations varying from 5 percent span (from the hub) to 90 percent span. Little usable data was acquired at the 105 percent chord line due to extremely high noise levels. Meridional/radial locations of the laser anemometer data are provided in table V.

The test program began with rig "shakedown" runs in September 1987. A facility wide shutdown forced the termination of data acquisition on November 1, 1988. During this time frame, stagnation temperatures at the inlet varied from approximately 25° C to below freezing and relative humidities from 20 percent to saturation conditions. A typical data acquisition period would start at 9:00 a.m. and would terminate near midnight. To minimize the effect of varying atmospheric conditions, every effort was made to acquire the data for one chord location during one test period. Further, rig operating conditions were continuously monitored and the operating point of the rig was regularly corrected to standard day conditions.

The installation and removal of the screens for generating the enhanced endwall boundary layers required an extensive disassembly of the test compressor. For this reason, all "baseline" data was obtained first and then the screens were installed. After the screen installation, all the thickened endwall boundary layer data was secured.

The "growth" of the rotor, due to rotational forces and blade aerodynamic loading, was measured to insure the proper positioning of the probe volume. The radial growth of less than

0.3 mm occurred entirely between 60 percent and design speed. No measurable blade "untwist" occurred between 1 and 60 percent design speed.

B. Run Period Setup and Data Acquisition Procedures

Prior to each daily data acquisition period, the laser anemometer and the probe volume position with respect to the rotor were checked. Laser anemometer alignment was checked by attempting to acquire signal at an upstream location at low flow conditions.

After the laser anemometer alignment was optimized, the probe volume position with respect to the rotor was determined. This was done by positioning the probe volume on the front lip of the rotor disk. This position was accurately known with respect to the blade surfaces. Once the probe volume was accurately positioned on the rotor, software offsets in the laser anemometer positioning code were corrected to insure accurate positioning of the probe volume.

The passage was generally surveyed at one chord location during each data acquisition period. The data acquisition began at the closest to hub location to be surveyed (5 percent span) and moved radially outward towards the tip. Data was acquired at an optimum offset angle from radial to minimize the blade blockage for runs inside the blade.

The laser anemometer run set up procedure and data acquisition technique is presented in more detail in references 2 and 8. At each axial/radial location, an attempt was made to acquire at least 5000 data measurements for each of two orthogonal velocity components. A reduced number of measurements were obtained at 75, 95, and 105 percent chords due to excessively low data acquisition rates in these regions. Normally, the time required to acquire these measurements was less than 30 min.

The laser anemometer survey locations in figure 8 represent, in actuality, arcs in space at these locations (fig. 9). During a data acquisition sequence, data began to be recorded on reception of a specific once-per-rev signal transmitted by the shaft angle encoder. Data was then accepted over a period of time during which the rotor accomplished 0.6111 revolution (22 of 36 rotor passages). During this time interval, 22 passages of the rotor passed through the stationary position of the probe volume. Whenever a valid signal was acquired, it was stored, along with the specific angular position of the rotor from the shaft angle encoder counter. Each velocity signal was then assigned a position in one of 1100 "windows" that together made up the arc that spanned the 22 passages of the rotor over which data was acquired. In the post processing phase of the project, these 22 passages were further combined into one "average" passage. At each axial/radial location in this average passage, an arc spanning the passage from suction surface to suction surface was divided into 50 windows.

PMT voltage was normally set at 1400 V when the seed particles were observed from direct scattering. The laser was operated at maximum power at all times. This varied from 1.6 to 2.4 W at a wavelength of 514.5 nm. Data acquisition with laser power levels less than 2.0 W was marginal or impossible in some locations and power levels of less than 1.6 W made data acquisition impossible at all locations. The variation in power output from the laser was apparently the result of variations in the input power from the commercial power system.

C. Data Reduction

At the end of the data acquisition phase, there were 960 sets of ensemble averaged velocity measurements. A set of measurements consisted of all the measurements of a single velocity component taken in each of the 1100 shaft positions at one axial/radial position. To obtain the complete measured velocity vector at an axial/radial location, two sets of velocity measurements must be combined: one axial velocity and one tangential velocity. At each location, at least two sets of data, one for each velocity component, were taken for each flow configuration. The flow configurations were the baseline or uniform inlet configuration and the enhanced endwall boundary layer inlet configuration. At many locations, more than two sets of data were acquired. At a minimum, 320 sets of laser anemometer data are required to complete the test (80 locations times 2 configurations times 2 velocity components).

The initial step in the data reduction process involved visually comparing all data sets at each location to determine the most noise free data at each location for additional processing. Acceptable runs with the same spatial location, goniometer setting, velocity orientation, and inlet configuration were combined into single sets. At least one set for each velocity component, regardless of data quality, was retained at each spatial location, for each inlet flow condition for additional processing. There were 486 sets of data selected for further processing and combining into the 316 final sets of measurements.

Extensive post-processing to reduce "outlier" noise was performed on the selected data points. This post processing is discussed extensively in reference 2. Following this processing, the two orthogonal velocity vectors for each inlet flow condition, spatial (axial/radial/ circumferential) position, and goniometer orientation were combined to create a combined axial/ tangential velocity vector. Goniometer orientation was taken into account here to insure that the correct axial/tangential velocity components were calculated.

Finally, the 243 remaining runs were combined to generate 158 separate data sets; one for each axial/radial location at each of two inlet flow conditions. There were two locations where no data were acquired due to time constraints during a run period. Thus the final experimental results used in this report consisted of 158 pairs of orthogonal velocity measurements, one near axial and one near circumferential at the 80 axial/radial locations shown in figure 8.

D. Error Analysis

Schenk (ref. 22) divides the possible errors inherent in a given experiment into three general classes: (1) accuracy errors, (2) precision errors, and (3) uncertainty errors. Accuracy errors are repeatable deviations from correct values that are the result of inherent errors in the system of the experiment. Errors such as these have been accounted for in the data acquisition and reduction phases of this investigation whenever they have been found or suspected.

Precision errors and uncertainty errors are random errors occurring during the acquisition of data; for example, in the stability and repeatability of the equipment used in the study. Information is provided concerning the compressor test facility and the system positioning table and represents the "best" measured information concerning the maximum possible inaccuracies in these variables.

Uncertainty errors are errors in the data acquisition for which a maximum imprecision cannot be measured. The uncertainties of these errors must be estimated statistically. Errors such as the velocity uncertainties are provided below.

Various errors discussed below can be divided into errors resulting (1) in the operation of the test compressor, (2) in the position of the probe volume, and (3) in the act of measuring the fluid velocities and processing those measurements.

1. Compressor test facility.—The compressor test facility has been in operation for a number of years and the inaccuracies associated with its operation are well documented (refs. 13 and 14). Table II presents a synopsis of the inaccuracies associated with the measurement of test facility operational parameters and conventional instrumentation used at the facility.

2. Laser anemometer system positioning error.—The accuracy of the optical system positioning table is 0.05 mm over a range of 25 cm in either direction. This figure is applicable to all three axes of movement. The direction of the input beams bisecting line can be determined to within ±0.01° using the goniometer over the goniometer operational range of ±3° from the compressor rig horizontal.

The measured precision error from the vertical and horizontal of the input laser beams is less than 1.4°. This results in a maximum measured velocity error of less than 1.5 percent.

The translating table was measured to be square with respect to the compressor facility to within less than 0.1°, resulting in a maximum positioning error of less than 0.38 mm over the distance of movement.

3. Laser anemometer system measurement error.—Information from three publications (refs. 23 to 25) was utilized extensively in assessing the errors present in the data acquired.

There are 1100 windows (50 per passage) at each axial/radial location. The passage to passage variations in the velocity fields have been minimal in previous investigations involving similar rotors. Therefore, to reduce the magnitude of the data processing problem, the measurements in the windows in each of the 22 measured passages have been combined into one of 50 equivalently positioned windows (with respect to the rotor blade suction surface) in an "average" passage. Then the velocity for any given window may be calculated as:

$$V_{pav}(k) = \frac{1}{nme(k)} \sum_{m=1}^{nme} V(m,k) \tag{2}$$

where $k = 1,....N_{wp}$, and nme is the number of measurements. The standard deviation is given by:

$$\sigma_{pav}(k) = \left\{ \frac{1}{nme - 1} \sum_{m=1}^{nme-1} \left[V_{pav}(k) - V(m,k) \right]^2 \right\}^{1/2} \tag{3}$$

So, the average velocity in any of the 50 windows at an axial/radial location in the average passage is the average of all the velocity measurements in any of the windows at the same

axial/radial location and the same circumferential location with respect to the suction surface of the rotor passage in which a particular velocity measurement was acquired.

Strazisar (ref. 23) states that the velocity probability density distribution is broadened by several factors which include:

(1) the random turbulent fluctuations in the flow,
(2) the flow unsteadiness that occurs at frequencies which are not integral multiples of the rotor rotational frequency,
(3) the average velocity gradients across the width of the measurement window (typically 1 or 2 percent),
(4) the flow variations caused by rotor speed drift during data acquisition (set to 0.4 percent), and
(5) the individual laser anemometer measurement errors (such as PMT noise).

There are a number of uncertainties and bias errors inherent in the laser anemometer method of velocity data acquisition. Reference 23 provides a detailed discussion of the various errors associated with the laser anemometer. Table VI is a listing of estimates of the size of the errors involved.

Two sources of measurement error are: statistical biasing error and angle biasing error. Peak values of the statistical biasing error in the leading edge region were as high as 10 percent. Since the vast majority of data included far smaller errors than the 10 percent near the leading edge region, this error was not taken into account in the data provided. When evaluating data in the leading edge region of the blade, the effects of this error must be considered.

Angle biasing (ref. 23) is a result of variations in the flow direction with time. In this experiment a frequency shift of 40 mHz was added to one of the two laser beams forming the probe volume. The artificial velocity added to the optical signal with the frequency shifter insures that virtually any particle that enters the probe volume will cross the necessary fringes to generate a valid signal, thus eliminating the problem of angle biasing. More detailed discussion of these various statistical errors is presented in references 27 to 29.

Another potential cause of error is particle lag. Measurements of the particles used in seeding the flow indicated that the mean particle size was near 0.5 μm. Less than 5 percent of the measured seed was greater than 1 μm in diameter. In this well behaved, steady state, subsonic environment, error due to particle lag should be very small.

The error associated with a single laser anemometer measurement is a function of a number of random factors such as flow turbulence intensity, optical noise, and electronic noise from various components. It is, therefore, standard procedure at NASA Lewis to determine the precision error by using the relation:

$$C_V = \frac{Z \cdot \sigma}{\sqrt{N}} \tag{4}$$

where C_V is the confidence interval as a fraction of the calculated average velocity, σ is the calculated standard deviation, N is the number of measurements, Z is a measure of the confidence interval (nominally set to 1.97 for a Gaussian confidence interval of 95 percent). This

calculation is used to determine the error margins of the experimental data used in this paper. Results of these error calculations are presented in appendix A.

V. RESULTS AND DISCUSSION

A. Introduction

A considerable amount of experimental data was acquired over the course of this investigation. It included "conventional" steady-state aerodynamic data that encompassed, among other measurements, surveys of total pressures, static pressures, and temperature at the inlet and exit of the rotor. The axial through-flow and the absolute tangential velocities were obtained via laser anemometer measurements. Extensive computational predictions of the flow field were made as well.

All of this information was obtained for two different inlet velocity profiles: a baseline inlet flow condition and an enhanced (thickened) endwall boundary layer inlet condition where both the hub and the shroud boundary layers were thickened.

The results presented below are presented in a relative reference frame. The experimental results have been transformed by the vectorial addition of a wheel speed averaged over all the measurements of a given inlet configuration to the absolute velocity vector that was measured at each axial/radial/circumferential location.

Section B presents a station by station comparison of the measured relative velocity vectors (figs. 11 and 12) and their computed predictions (figs. 13 and 14). Since the radial velocity component could not be measured with the current data acquisition system, the total relative velocity vector could not be measured. The relative vector analyzed in this section is the vector component in the axial/tangential plane and this will be referred to as the relative total velocity vector.

Section C provides a discussion of the grid velocity deviations (figs. 19 and 20). The principal thrust of this experiment was to determine the effects of thickened endwall boundary layers on the development of the classic passage vortex. Since the radial velocity component was not measured, the actual passage vortex could not be measured. Nevertheless, some information on the development of the passage vortex can be obtained by comparing the measured velocity components with respect to each other and with respect to a calculated primary flow component.

Before discussing the results obtained, some information which will help clarify the figures to be presented herein will be given. In particular, figure 10 shows the coordinate system that is used in this analysis. When referring to a percent span, distance is measured from the hub. One way that the experimental data and computed predictions are presented in this report is using cross channel plots. Figure 10(c) shows the orientation of the crosschannel plots used to present the experimental results. With the exception of the station 1 data, these plots are of data at a constant chord location. The station 1 data is at a constant axial location upstream of the rotor, the aerosurvey probe location. The view of these plots is downstream along the stream surfaces seen in the meridional view in figure 4. Compressor rotation as viewed is clockwise. Therefore, the suction surface is at the bottom of each figure and the pressure surface on the top. The hub is at the left of the figure and the shroud is at the right. In figure 10(c), the blade is shown at the top of the figure. Stations 1 and 8 are upstream and downstream, respectively,

of the blade passage, so no blade will be shown. The upper and lower boundaries of the passage are arbitrarily defined as extensions of the blade mean camber line. The blade location in the station 3 figures is always at the bottom of the figure.

Crosschannel plots presenting the computed predictions vary from those presenting experimental results only in the following manner. Experimental data is presented from the suction surface of one blade to the suction surface of the following blade. Therefore the blade will be shown in the crosschannel plot. The computed predictions are of a channel. Therefore, the predicted results will not show the blade. In all other respects, the plots are the same.

Data presented in the figures containing line plots has been smoothed somewhat to improve the appearance and to clarify the flow features. To accomplish this, the separate measured velocities, axial and tangential, were individually reviewed and selected for presentation and smoothing. Smoothing included the removal of windows with no velocity measurements and the modification of velocities in windows where the variation from adjacent windows is greater than 10 percent. Specific information on smoothing procedures is presented in reference 2.

Appendix A contains computer printouts listing the measured data. These results include uncertainty calculations, relative total velocities, relative flow angles, flow grid deviation velocities, and flow-grip deviation angles. These experimental results have not been smoothed. The "cp" is the window number. Window 1 starts on the suction surface of blade number 1 and window 51 is the window that ends at the suction surface of the blade which is one counterclockwise passage away. In the first column of the tables are the 5 percent span from hub values, in the next column are the 10 percent span from hub values, and the values in each column thereafter are 10 percent farther from the hub. The final column lists values from the 90 percent span measurements.

Appendix B contains selected calculated results. The grid used to plot these results is 79 by 49 at each reviewed station. It was simply not feasible to present all of the predicted results at a given channel location. The grid for the predicted results spans an average passage. The station 2 crosschannel plots presented for the computed predictions are at 0.01 percent chord, just inside the blade leading edge.

Reference 2 contains a review of the acquired experimental data and presents unsmoothed tables of the following measured results: (1) axial velocities, (2) absolute tangential velocities, (3) number of axial velocity measurements, (4) number of tangential velocity measurements, and (5) calculated measurement uncertainties for both velocity components.

The following summary of experimental results was taken from reference 2: "The quality of the measurements acquired during this experiment was strongly dependent upon the location at which they were acquired. Overall data quality deteriorates the farther downstream into the flow passage that the measurements were taken. Data acquired at station 8 is usable only in the outer half of the passage at best.

Data acquired near passage boundaries is also of lower quality than the data acquired at midpassage. The data acquired at 5% and 90% span is generally marginal.

Blade metal blockage greatly increased the areas of the passage where velocities could be measured near blade surfaces. Since the beam crossing angle is only approximately 4°, increased

areas of poor data near the blade surfaces must be the result of the blockage of signal reflected from the particles towards the collecting optics lens.

Qualitative agreement between the computed predicted axial velocity and absolute tangential velocity and the measured experimental data is good. However, quantitative agreement between the two sets of results can be improved.

Unfortunately, velocity measurements could not be obtained near the blade surfaces or in the endwall regions. As a result, the predicted velocity gradients off the suction surface and in the endwall regions could not be observed."

B. Review of Results in the Relative Reference Frame

1. Introduction.—The most useful reference frame for designing and studying the rotor and rotor air flows is the relative reference frame where the rotational speed of the rotor is vectorially added to the fluid velocity. A comparison of the two test cases in this reference frame with the computed predictions should help clarify why the differences between the two test inlet flow profiles become less prominent as the flow moves through the rotor. The results in this section will be presented station-by-station.

Figure 11 presents the measured experimental relative total velocities for both test inlet flow conditions. Figure 12 provides the measured experimental relative flow angles for both test inlet flows. Figure 13 shows the computed predictions for relative total velocities and figure 14 shows the relative flow angles. Due to the nature of the solution grid used in the Navier-Stokes solver, plots of the predicted solution at the inlet station could not be made. The station 2 predicted results are from a location that is 1 percent of the rotor chord, immediately following the leading edge.

Although this report will refer to "relative total velocities," this terminology is not completely accurate since the velocities presented do not include the radial component. This component has been considered small for the purposes of this report.

2. Station 1 (inlet).—The inlet measured relative total velocities and flow angles reflect the transition from absolute reference frame to relative reference frame. The addition of the wheel speed obviously reduces the effect of the inlet axial velocity. At the wheel speeds that the rotor was operated at, a change of axial velocities of almost 5 m/sec was required to result in a change of 1° in relative flow angle. Figure 15 shows the measured inlet relative total velocities and figure 16 shows the relative flow angles for the aero-survey results. While the differences between the two inlet test cases are small, they are significant. However, the addition of the wheel speed, resulting in an apparent reduction in differences between the two inlet flow conditions, must be considered as a reason for the minimal effect on exit flows due to the thickened endwall boundary layers.

The total pressures, static pressures, temperatures, and measured flow angles are used to calculate the inlet boundary conditions for the Navier-Stokes solver.

3. Station 3 (5 percent chord).—Station 3 is situated at the 5 percent chord location, downstream of the blade leading edge and is the farthest upstream location inside the rotor at which data was acquired. The quality of the data acquired at this location is somewhat poorer than

many of the results acquired farther downstream in the passage, particularly near the endwalls and the blade surfaces. Nevertheless, it does provide some information concerning the condition of the flow immediately downstream of the blade leading edge.

The measured relative total velocities (fig. 11) at this location have a similar overall appearance. Here the velocity gradient runs from the hub/pressure surface corner to the tip/suction surface corner. The gradient runs from about 200 m/sec (line K) to peaks of 270 m/sec (line R) near 70 percent span and approximately ⅓ pitch from the suction surface.

The measured relative flow angles (fig. 12) at this location appear similar to each other with relative flow angles between 60° (line O) near the hub to 70° (line Q) near the tip. Generally, the experimental data for relative flow angles shows a radial variation with a tendency, particularly in the enhanced endwall boundary layer case, towards lower relative flow angles in the hub/suction surface corner.

The computed predictions for both cases are very similar to the measured results. Relative total velocities (fig. 13) vary from 100 to 290 m/sec and the relative flow angles (fig. 14) vary roughly from 60° to 75°. The Navier-Stokes predictions indicate the highest relative total velocities exist on the suction surface in the outer half of the passage with the lowest in the hub/pressure surface corner. Both test case predictions reflect the beginnings of thin boundary layers on the suction surface. Notice the large flow boundary layer predicted by the Navier-Stokes solver on the shroud side of the passage. Here, the absolute velocity goes to zero at the shroud boundary. However, in the relative reference frame, the velocity at the shroud reflects the wheel speed. Similarly, the relative total velocities goes to zero along the blade surfaces and the hub surface.

The appearances between the predicted results and the measured experimental results is also, for the most part, similar to the measured experimental data. One apparent difference between the two sets of measured results is the position of the 60° relative flow angle line (line O). The baseline configuration seems to indicate a more radial gradient than the enhanced endwall boundary layer case. However, the relative flow angles are shallow and it is difficult to state conclusively that this difference exists.

It is apparent that the transition from the absolute reference frame to the relative reference frame has greatly reduced the apparent magnitude of the differences between the two inlet test configurations. It can also be stated that, at this location, the qualitative agreement between the predictions and the experimental results is very good.

4. Station 4 (25 percent chord).—The measured experimental results (fig. 11) continue to show the velocity gradient running from the hub/pressure surface corner to tip/suction surface corner. Relative total velocities vary from less than 180 m/sec (line I) up to 250 m/sec (line P) for both test cases. The quality of the results near the blade surfaces is such that no firm conclusions can be drawn in those areas. However, there are some indications of reduced velocities off of each blade surface for both test cases.

The computer predictions (fig. 13) show the same general trends of relative total velocities as the experimental results. Notice the relative positions of the 200 m/sec lines for the Navier-Stokes predictions (line K) and the experimental results (line K). Also notice the positions of the 240 m/sec lines for the computed predictions (line O) and the experimental results (line O).

By station 4, the maximum predicted velocities in the suction surface corners has been reduced by 50 m/sec in both cases. The region of higher relative total velocities in the suction surface tip region is now larger in the case of the enhanced endwall boundary layer. Two other flow features are now apparent: (1) apparent are the growth of the suction surface boundary layer and tip region boundary layer and (2) also apparent is the beginning of a transition from the suction surface/tip velocity gradient to a velocity gradient oriented more from hub to shroud.

The character of the relative flow angles shown by the experimental results (fig. 12) has changed considerably by the 25 percent chord location. At this location, the region of least turning is in the hub/pressure surface corner for both test cases. For the baseline case, the flow angle gradient runs from hub/pressure surface corner to tip/suction surface corner. The turning of the flow has reduced the relative flow angles somewhat in both cases. Peak relative flow angles over most of the passage are between 55° (line N) and 65° (line O).

The Navier-Stokes predictions of relative flow angles (fig. 14) show the same gradient from hub/pressure surface to tip/suction surface. The artificially enhanced boundary layer predictions show a region of relative turning angles that are greater than 60° (line O) that are not shown in the experimental case. This lack of turning on the shroud side of the passage was apparent at 5 percent chord, also, but that may very likely have been the result of poorer quality data acquired at the 80 percent span at that chord location. The 55° relative flow angle lines (line N) compare very favorably between experimental and computed predictions for both the baseline and the enhanced endwall boundary layer case.

Similarities between the experimental measured velocity magnitudes and the computed predictions is also apparent at station 4. The 200 m/sec line for both the experimental results (line K) and the computed predictions (line K) runs in approximately the same passage locations. Peak predicted velocities (250 m/sec) and measured velocities (250 m/sec) are in good agreement and both occur near the suction surface tip region.

5. Station 5 (50 percent chord).—Experimental results (fig. 11) at 50 percent chord (station 5) show the change in the flow field such that the velocity gradients are more radial in direction. Some indications of a tip boundary layer exist, particularly the suction surface/tip region. These indications are not strong, primarily because of the inability of the laser anemometer to measure velocities beyond 90 percent span. There are also indications of a suction surface boundary layer but it also does not appear prominent. Quality of the data near the suction surface is much poorer.

The experimental velocities do not show the predicted island of higher velocities (230 m/sec, line N, computed predictions, fig. 13) in the outer half of the passage just beyond the predicted suction surface boundary layer and shroud boundary layer. This may be the result of poorer quality data at the radial locations nearer the shroud. The experimental results also do not show the beginnings of a region of higher velocity fluid immediately above the pressure surface near the 70 percent span location. Once again, this may be the result of poorer quality data near the blade pressure surfaces.

The relative flow angles, both measured (fig. 12) and predicted (fig. 14) have a largely radial gradient outside the shroud boundary for both inlet test cases. The experimental data acquired is very poor in the region of the pressure surface. It is difficult any judgements on the

changes in the relative flow angles in these regions. Therefore, the trend predicted by the Navier-Stokes solver showing higher relative flow angles at lower radii cannot be confirmed. Overall, when comparing the experimental results and the computed predictions, the most noticeable difference is in the magnitude of the relative flow angles. Most of the experimental results show turning angles between 45° (line L) and 55° (line N) with the 50° relative flow angle line near midpassage and the 55° turning line near 80 percent span. The Navier-Stokes predictions show relative turning angles greater than 55° over the outer 35 percent of the passage.

The fine features predicted by the code, such as the region of lower relative turning angles in the hub/suction surface corner and the region of very high turning in the tip/suction surface corner cannot, unfortunately, be resolved by the laser anemometer system used during this program.

6. Station 6 (75 percent chord).—The measured relative total velocities (fig. 11) begin to show the growth of the suction surface boundary layer that is so prominent in the Navier-Stokes predictions. There are also some indications, particularly on the tip/suction surface corner of boundary layer development. Nonetheless, experimental results do not show the prominent shroud boundary layer predicted by the Navier-Stokes solver.

Experimental results at station 6 show a very prominent radial variation in velocities. Peak velocity magnitudes for both experimental results and computed predictions are also similar. For example, at 75 percent chord, the enhanced endwall boundary layer data predicts maximum relative total velocities of the order of 220 m/sec (line M) at approximately 75 percent span. The baseline case indicates somewhat higher velocities of around 230 m/sec (line N) at 80 percent span. Both sets of computed predictions show peak velocities of 220 m/sec, near the tip/pressure surface region with much larger regions of relative total velocities greater than 210 m/sec (line L).

The experimental measurements do not indicate any migration of higher velocity fluid towards the tip/pressure surface corner that is apparent in the computed predictions.

The agreement between the measured relative flow angles and the Navier-Stokes predictions is very good with both cases showing the flow angle gradient running from the hub/suction surface corner to the tip/pressure surface corner. Predicted and measured flow angle magnitudes also show excellent agreement.

7. Stations 7 and 8 (95 and 105 percent chord).—Station 7 experimental results and Navier-Stokes predictions once again show good qualitative agreement. The most notable differences are: (1) a much more radial variation in velocity from hub to shroud in the experimental data and (2) a lack of the predicted prominent shroud boundary layer. There is no indication in the experimental results of the transport of higher velocity fluid to the tip/pressure surface region. Similarly, while there are some indications of a shroud boundary layer buildup, neither set of experimental results reflects the prominent shroud boundary layer predicted by the Navier-Stokes solver.

Unfortunately, little usable information was measured at station 8 with the laser anemometer system used in this program. The Navier-Stokes predictions at station 8 are very similar in appearance to the station 7 predictions.

8. Summary.—Overall, the qualitative and quantitative agreement between the measured experimental results and the Navier-Stokes prediction is very good. There are two noticeable differences between the computed predictions and the experimental results. The first is the obvious lack of a prominent suction surface boundary layer in the measured experimental results. The second is the lack of an apparent migration of the high velocity fluids between the suction surface/tip region and the pressure surface/tip region.

C. Grid Velocity Deviations

The major objective of this investigation was the observation and analysis of the development of the passage vortex that is thought to develop in a turning passage as a result of the spanwise shear. The classic passage vortex is created in a turning passage such as a compressor rotor by the spanwise total pressure gradient (velocity gradient). While this vortex is generated by the velocity gradients that exist in the endwalls of both test configurations, it should be more pronounced in the enhanced endwall boundary layer configuration because of the more prominent velocity gradients generated by the insertion of the distortion screens upstream of the rotor.

Since the total velocity vector could not be resolved because of the lack of radial velocity information, this section must be confined to an examination of the "velocity deviations" that can be calculated from the two velocity components that were measured. The velocity deviations from the grid lines provide an indication of the development of this passage vortex. The differences between the relative flow angles for the two inlet test cases can also provide valuable insight into the development of the passage vortex.

Secondary flow has been defined for the purpose of this report as the difference between the measured flow and some "primary flow." The primary flow field considered for this project is the flow along the generated primary computational grid (fig. 17). This has been used for ease of generation of this field and the uncertainties in the definition of the term "primary flow" field. In fact, since the rotor is operating subsonically and it is far from the measured stall point, this velocity field should be near any actual potential flow field.

It should be noted that the calculated deviation velocities and the relative flow angle/grid angle differences become very sensitive to the calculated grid. Therefore, caution should be used when assessing the magnitudes and the absolute directions of these calculated values. A comparison between the results for the two inlet conditions is more appropriate for assessing the deviation velocities and the relative flow angle/grid angle differences. Therefore, the tangential velocity deviations of both the experimental and the computed predictions were calculated for the two inlet flow configurations and compared to assess the development of the passage vortex.

Consider figure 18. It was shown in reference 28 that the tangential velocity deviations can be defined as:

$$W_{s\theta} = W_{\theta} - W \sin \psi \cos (\beta - \psi) \tag{5}$$

Figure 19 presents line plots of the flow deviation velocities calculated from the experimental results, $W_{s\theta}$, at each of the axial locations where data was acquired. Figure 20 presents similar information from the Navier-Stokes predictions.

Line plots of the experimental relative flow angle differences, which are the differences between the relative grid and the relative flow angles, are shown in figure 21. Similar information from the Navier-Stokes predictions are shown in figure 22.

At the inlet, station 1, the experimental results show that relatively flat velocity deviations are obtained for both configurations. The positive velocities represent a fairly large positive incidence for both test configurations. This is consistent with the flow condition selected for this test. The positive deviation velocities indicate that the flow has not turned far enough to be parallel to the grid lines.

The inlet baseline deviation velocities are relatively constant across the passage. The spanwise variations tend to reflect variations in the grid extrapolations upstream of the rotor. These extrapolations reflect the three-dimensionality of the blades themselves.

The first plot in figure 19 shows experimental results at the inlet survey location for the two inlet test configurations. The differences in the velocity deviations is very noticeable with the baseline inlet configuration having the greatest deviations at midspan and the enhanced endwall boundary layer inlet configuration having larger deviations at the endwalls. This is a manifestation of the thickened endwall boundary layers of the enhanced inlet test configuration.

The differences between the two test inlet configuration deviation velocities (fig. 23) are very noticeable, but are small. The enhanced configuration is 6 m/sec larger near the hub than the midspan location and about 5 m/sec larger at the tip than near the midspan. At the 90 percent span line, the differences are much smaller with the enhanced, about 1 m/sec larger at the 80 percent span location.

The radial only variation in flow angles is also obvious at this location. The enhanced endwall boundary layer test configuration reflects the higher throughflow component with a region of lower flow angle differences in the center span. A closer consideration of the data presented in appendix A shows that at the inlet station, the differences between the grid angles and the relative flow angles are relatively constant at between 11° and 14° between 10 and 90 percent span. The artificially enhanced endwall boundary layer inlet configuration has variations from 9.5° and 16.5° over the same span.

As the flow moves into the rotor to the 5 percent chord location (station 3) both the experimental results (fig. 19) and the Navier-Stokes predictions (fig. 20) of the "deviation velocities" show the same overall trends. Here the primary velocity gradients outside the boundary layers exist from suction surface to pressure surface with the deviation velocities increasing towards the pressure surface. The magnitudes of the experimental velocity deviations are comparable to the predicted velocity deviations. For example, the experimental 15 m/sec line (line L) and the predicted 15 m/sec line (line N) fall roughly in the same location in the passage.

Notice the Navier-Stokes predicted 20 m/sec line (line O) and its experimental equivalent (line M). The qualitative agreement is good. The artificially enhanced endwall boundary layer inlet case, both experimental and predicted showing lower "deviation velocities" in the midspan region where the axial velocity components are higher than the baseline configuration. Notice, however, that the predicted deviation velocities are higher along most of the pressure surface in the baseline inlet case. Overall, the station 3 deviation velocities, both predicted and experimental, fall within the range of 5 to 30 m/sec.

At the 5 percent chord location, the Navier-Stokes predictions of the relative flow angle/grid angle differences (fig. 22) show noticeable differences between the baseline inlet configuration and the artificially enhanced endwall inlet configuration. The larger differences in the midspan portion of the passage for the baseline configuration reflect the lower axial throughflow velocity for this configuration.

It is apparent that the blade has already affected the flow in the passage with the deviation angles 4° or less over a substantial portion of the passage. Notice the predicted deviation angles are flatter over most of the baseline inlet test case than for the enhanced endwall boundary layer inlet test case, due to the flatter inlet velocity profile.

Endwall boundary layer effects are prominent for both sets of predictions, particularly on the shroud side where the stationary shroud causes the development of a prominent boundary layer.

A comparison of the Navier-Stokes predictions and the measured experimental results show a reasonable agreement in the appearance and magnitude. However, both sets of experimental results reflect less turning than the Navier-Stokes predictions. For example, the experimental results show a definite 0° difference line (line K) for both inlet configurations while the Navier-Stokes predictions show this 0° difference line (line K) to be very close to the suction surface. At the other extreme, the experimental flows contain certain span locations, 50 to 70 percent for the baseline and 40 to 80 percent for the enhanced endwall configuration, where the deviation angles do not reach 10° (line M). The comparable Navier-Stokes predictions show large portions of the flow turned at least 10° (line U). Indeed, all span locations for the baseline inlet case contain some regions turned at least 10°.

Figures 23 and 24 show the differences between the deviation velocities of the two inlet test configurations, $V_{sec,b}$-$V_{sec,a}$, and the differences in the relative flow angles between the two test cases, An_b-An_a, respectively. Figures 25 and 26 show the same information for the Navier-Stokes predictions. The differences between the deviation velocities of the two inlet test cases and the differences in the relative flow angles of the two inlet test cases reflect the effects of the enhanced endwall boundary layers on the flow.

At the station 3 location both the experimental results and the Navier-Stokes predictions of the differences between the two inlet flows are similar. Both show higher differences in the velocity deviations at midpassage and lower or negative deviation velocities near the endwalls.

The experimental differences tend to show a large area with 0 m/sec difference (line K) between the two inlet test cases and a gradual increase to 5 m/sec (line L) along the outer half of the passage. The differences in predicted results are much smaller and show much smoother gradients. The variations in flow angle are from $-1°$ (line J) to $+1°$ (line M) from hub to midspan. Proceeding towards the shroud, the differences become slightly less by about 1° and then tend to increase. The experimental results do not reflect this dip and, unfortunately, no experimental data was acquired in the outer 10 percent of the passage where the Navier-Stokes predictions indicate a large increase in the deviation velocity differences.

The experimental results seem to indicate that higher differences in the velocity deviations in general in outer half of the passage with the numbers reaching 5 m/sec. At this location, the experimental results are not usable at the 80 percent span location. Overall, the experimental results appear similar to the inlet conditions with the gradients radial in appearance and

increasing from hub to shroud. The overall variation is generally from 0 m/sec (line K) to 5 m/sec (line L).

The Navier-Stokes predictions of differences between the inlet test cases also retain an overall radial appearance except near midpassage where the predicted results begin to show the effects of the blades of the flow. The most striking difference between the experimental results and the Navier-Stokes predictions is in the magnitude of the deviation velocity differences. Over the region of the passage where usable experimental data was acquired, the Navier-Stokes predictions show variations in deviation velocity differences from -3 to 3 m/sec or less. This is less than the measured experimental results. Unfortunately, the scatter in the measured data makes it impossible to resolve the higher deviation velocities predicted on the blade surfaces.

The experimental data for the differences in the two inlet test case relative flow angles show a peak difference of 2° (line H) at the midspan region with the flow angle differences decreasing to $-1°$ on the hub side and down to $+1°$ on the shroud side. The scatter in the data makes it impossible to ascertain much from the results at this location except for the overall radial character of the gradients.

The flow angle differences between the two inlet configurations predicted by the Navier-Stokes solver (fig. 20) show, like the deviation velocities, the radial gradients near the endwalls and the beginnings of blade effects near the midspan. Once again, the magnitude of the predicted results is smaller with the differences varying from $-1°$ to $+1°$ over most of the passage.

By station 5 (50 percent chord), there are noticeable differences between the experimental results (fig. 19) and the Navier-Stokes predictions (fig. 20). Overall, the predictions indicate a region of higher negative velocity deviations at the center of the passage with lower negative deviation velocities near the endwalls. The experimental results show a region of larger negative velocities (-5 m/sec, line H) as do the Navier-Stokes predictions (-5 m/sec, line J). However, both sets of experimental predictions show higher negative deviation velocities towards the tip/suction surface corner, a trend that is not apparent in the predicted results.

Both sets of results, experimental and predicted, are of approximately the same magnitude with only shallow gradients in the passage at this location.

Since the deviation velocities are calculated from the primary through flow grid, they are very sensitive to blade geometry. The slight change in the blade geometry at 50 percent chord is the most likely reason for the negative deviation velocities at this location.

The predicted relative flow angle/grid angle difference plots (fig. 22) for the two inlet test conditions appear very similar with minimum differences existing near midpitch and the differences approaching zero at both blade surfaces.

The experimental results indicate that at the 50 percent chord location, relative flow angle/grid angle differences vary from $-5°$ to 0° with the $-5°$ in the tip/suction surface region. This implies an overall counterclockwise passage vortex at this axial location, as is also shown by the deviation velocities. However, this tendency is gone by stations 6 and 7.

There are noticeable differences between the experimental results and the computed predictions at the 50 percent chord location. The experimental results do not show the region of

lower flow angle/grid angle differences at midpassage that are predicted by the Navier-Stokes solver (line H). This difference may be the result of the quality of the experimental results at this location and the large predicted suction surface boundary layer that is not apparent in the experimental results.

A comparison between the differences in deviation velocities between the two inlet test cases of the predicted results (fig. 25) and measured data (fig. 23) show some noticeable differences at this 50 percent chord location. The experimental results at this location show a difference in deviation velocities of the two test cases that contains roughly radial deviation velocity gradients. Here, the differences are 0 m/sec (line K) at about 20 and 80 percent spans and approximately -5 m/sec (line J) at midspan. The magnitude of differences between inlet and 50 percent chord remain about the same but the trend is reversed with the lower readings now in the center at the 50 percent chord location.

The differences in flow angles between the two sets of experimental results also show this reversal. Here the differences in the flow angles go from 0° (line F) near the endwalls to less than $-2°$ (line D) near midspan.

Notice the similarities between the station 4 (25 percent chord) and the station 5 (50 percent chord) results.

The most noticeable feature about both the predicted deviation velocity differences and relative flow angle differences at the station 5 location is the lack of features. Over most of the passage, the relative flow angle differences are between $-0.5°$ and 0°. The deviation velocity differences are between -1 and 0 m/sec over most of the passage.

The downstream 95 percent chord location (station 7) is the most downstream location at which enough acceptable data was acquired to generate cross channel plots.

At this location, the deviation velocities are again positive, indicating the flow has not quite turned to follow the passage. Deviation velocities for both the experimental results (fig. 19) and the Navier-Stokes predictions (fig. 20) are from 0 to 20 m/sec.

When looking at the Navier-Stokes predictions (fig. 20) at station 7, there exists a region of slightly higher deviation velocities over the suction surface near midspan for both inlet test configurations (line N). This implies a passage vortex in this region although the differences in velocities are small. The differences between the two predictions (fig. 25), the baseline inlet and the enhanced endwall boundary layer inlet, are very small. The experimental data (fig. 19) does not reflect this region of higher deviation velocities, although there is some indication of this in the baseline 10 inlet m/sec (line K) line and the artificially enhanced endwall inlet 20 m/sec (line M) results. This discrepancy is caused by the much thinner measured suction surface boundary layer and the much thicker predicted suction surface boundary layer.

The experimental results reflect essentially a blade-to-blade deviation velocity gradient increasing towards the suction surface. This is similar to the Navier-Stokes predictions on the pressure side of the passage (nonthick boundary layer side) for both inlet configurations.

The predicted deviation velocity difference plots and relative flow angle difference plots remain relatively featureless with the major differences in that region of the passage where the code predicts a large suction surface boundary layer to exist. The predicted flow in this region

does appear to be that of the characteristic passage vortex. Beyond this region, on the pressure side of the passage, there is little in the Navier-Stokes predictions to indicate a classic passage vortex.

Experimentally, acceptable data was acquired for both inlet configurations only between 20 and 80 percent spans. In this region, the deviation velocity differences (fig. 25) are relatively constant in the inner half of the passage at -4 m/sec and trend towards 0 m/sec in the shroud side of the passage. The differences in the relative flow angles also reflect this with the difference $-2°$ in the inner half of the passage and tending towards $0°$ by the 80 percent span. Experimentally, the results indicate a small passage vortex in the outer half of the passage that is not reflected in the Navier-Stokes predictions.

VI. SUMMARY AND CONCLUSIONS

The purpose of this investigation was to assess the development of the passage vortex inside a high speed compressor rotor. Experimentally, this was done by obtaining a detailed map of the flow field inside a high speed rotor operating subsonically for two different inlet flow field configurations. One flow field configuration consisted of an "undistorted" inlet velocity profile and the other configuration consisted of a parabolic inlet profile generated by placing an axisymmetric distortion screen on the hub and on the shroud well upstream of the rotor. In addition to the experimental effort, a fully three-dimensional Navier-Stokes solver was used to analyze both inlet flow test configurations.

The two flow fields were evaluated and compared. Experimental results and computational predictions were also compared. The similarities and differences were noted and the following statements can be made:

1. A comparison between the experimental relative velocities and relative flow angles and their computed predictions show good agreement qualitatively and quantitatively with the exception of the large suction surface boundary layer predicted by the Navier-Stokes solver.

2. Experimentally, the differences between the two inlet flow conditions tend to wash out as the flow moves through the rotor. At inlet, deviation velocity differences between the two inlet flow conditions vary from -2 to 4 m/sec and at exit from -4 to 0 m/sec. The magnitude of the relative flow angle differences varied from $-4°$ to $0°$ at inlet to $-3°$ to $0°$ at exit.

3. Computationally, the differences between the two inlet test cases virtually disappeared between inlet and exit.

4. Uncertainties in the measured experimental results, coupled with difficulties in matching rig conditions between experimental data acquisition days made it difficult to assess many small differences in flow features predicted by the Navier-Stokes solver.

VII. RECOMMENDATIONS

Although the experimental results and the Navier-Stokes predictions agree well overall, there exist a number of discrepancies between the experimental results and computed

predictions. These discrepancies warrant some recommendations for improvements for any further research.

1. Improvements in the laser anemometer data acquisition system design to allow measurements nearer to solid surfaces. These improvements include higher laser power, simplification of the optical train, and different seeding material.

2. Improvements in the test facility to allow more precise control of the rig operating conditions. These improvements include the ability to control inlet temperature, pressure, and relative humidity, more precise control of rotor wheel speed, and more precise control of mass flow and its measurement.

3. The cause of the predicted prominent suction surface boundary layer and the rapid decay of the differences between the two inlet flow conditions in the predicted Navier-Stokes results should be explored computationally to determine the accuracy of these predictions.

IX. APPENDIX A

EXPERIMENTAL RESULTS

A1. Calculated uncertainties

A2. Relative total (axial/relative tangential) velocities

A3. Relative flow angles

A4. Flow/grid deviation velocities

A5. Flow/grid deviation angles

TABLE A1.—CALCULATED UNCERTAINTIES

(a) Calculated Axial Uncertainty (percent)

BASELINE INLET, STATION 1

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	1.60	0.72	0.98	1.13	0.84	0.52	0.77	0.75	1.13	3.93
2	1.33	0.68	0.95	1.18	0.87	0.54	0.80	0.85	1.06	9.19
3	1.57	0.70	0.85	1.23	0.92	0.47	0.79	0.88	1.40	3.23
4	1.54	0.59	0.91	1.08	0.85	0.56	0.72	0.78	1.31	7.25
5	1.50	0.67	0.91	1.19	1.00	0.50	0.85	0.74	1.18	13.31
6	1.48	0.62	0.89	1.19	0.87	0.46	0.81	0.76	1.22	6.45
7	1.50	0.65	0.97	1.34	0.88	0.50	0.78	0.75	1.19	12.26
8	1.70	0.61	0.89	1.41	0.83	0.52	0.75	0.76	1.34	8.93
9	1.80	0.66	0.95	1.28	0.91	0.53	0.83	0.75	1.25	7.38
10	1.40	0.70	0.95	1.09	0.87	0.49	0.95	0.80	1.10	28.77
11	1.47	0.63	0.90	1.15	0.87	0.47	0.84	0.90	1.21	15.23
12	1.30	0.60	1.06	1.12	0.83	0.49	0.85	0.79	1.27	9.61
13	1.31	0.70	0.99	1.27	0.81	0.51	0.80	0.77	1.33	4.57
14	1.62	0.63	0.97	1.38	0.74	0.53	0.76	0.76	1.04	6.60
15	1.51	0.66	0.99	1.20	0.83	0.50	0.77	0.75	1.10	4.69
16	1.39	0.67	1.02	1.34	0.88	0.52	0.89	0.71	1.12	7.49
17	1.42	0.65	0.92	1.15	0.88	0.49	0.74	0.67	1.27	3.78
18	1.50	0.60	0.97	1.08	0.88	0.48	0.90	0.83	1.36	7.18
19	1.85	0.61	0.88	1.50	0.80	0.51	0.75	0.78	1.29	7.23
20	1.44	0.62	0.85	1.33	0.79	0.56	0.78	0.67	1.51	3.77
21	1.40	0.64	0.92	1.17	0.82	0.50	0.82	0.70	1.21	5.40
22	1.52	0.67	0.90	1.21	0.95	0.51	0.73	0.65	1.22	4.41
23	1.30	0.59	0.93	1.18	0.93	0.51	0.79	0.77	1.18	6.02
24	1.31	0.70	0.92	1.08	0.95	0.48	0.67	0.71	1.12	13.91
25	1.55	0.72	0.89	1.20	0.80	0.46	0.79	0.76	1.14	6.03
26	1.57	0.69	1.10	1.33	0.95	0.51	0.90	0.76	1.27	9.60
27	1.54	0.61	0.88	1.23	0.85	0.47	0.78	0.68	1.21	6.45
28	1.29	0.62	0.83	1.05	0.83	0.53	0.77	0.74	1.23	3.78
29	1.32	0.69	0.93	1.31	0.78	0.50	0.86	0.72	1.34	11.53
30	1.51	0.59	0.84	1.13	0.80	0.48	0.79	0.65	1.26	5.92
31	1.40	0.70	0.91	1.16	0.90	0.50	0.85	0.70	1.01	8.94
32	1.38	0.65	1.03	1.39	0.73	0.51	0.79	0.70	1.23	5.03
33	1.61	0.62	0.78	1.26	0.95	0.54	0.85	0.77	1.26	11.64
34	1.40	0.62	0.91	1.20	0.78	0.55	0.89	0.78	1.29	3.89
35	1.23	0.62	0.98	1.36	0.79	0.49	0.80	0.73	1.26	9.47
36	1.31	0.65	0.90	1.28	0.84	0.46	0.87	0.80	1.22	3.39
37	1.38	0.66	0.96	1.14	0.88	0.48	0.75	0.76	1.23	5.12
38	1.50	0.61	0.97	1.32	0.78	0.48	0.83	0.70	1.11	5.71
39	1.44	0.64	0.86	1.21	0.76	0.48	0.79	0.79	1.47	12.12
40	1.34	0.60	0.94	1.24	0.74	0.46	0.68	0.87	1.26	12.38
41	1.15	0.69	0.89	1.32	0.97	0.48	[illegible]	[illegible]	[illegible]	11.82
42	1.36	0.64	0.87	1.30	0.79	0.46	0.82	0.73	1.29	16.06
43	1.74	0.72	0.92	1.23	0.74	0.53	0.76	0.69	1.21	3.45
44	1.59	0.66	0.98	1.29	0.87	0.48	0.75	0.84	1.12	4.09
45	1.45	0.60	0.94	1.08	0.88	0.48	0.81	0.74	1.15	7.90
46	1.58	0.61	0.91	1.07	0.92	0.51	0.90	0.69	1.24	4.55
47	1.34	0.58	0.86	1.20	0.86	0.50	0.84	0.76	1.25	13.05
48	1.50	0.75	0.96	1.12	0.83	0.50	0.83	0.82	1.16	34.79
49	1.50	0.62	0.92	1.30	0.85	0.51	0.79	0.77	1.23	12.55
50	0.79	0.40	0.56	0.81	0.47	0.29	0.40	0.51	0.88	25.63

BASELINE INLET, STATION 2

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	0.69	3.48	11.82	10.34	0.66	0.65	0.86	0.55	0.42	2.12
2	0.77	3.42	15.60	9.83	0.74	0.63	1.30	1.15	0.56	3.50
3	0.77	3.63	9.35	8.55	0.77	0.82	1.51	1.13	0.79	8.30
4	0.87	4.18	9.53	11.60	1.43	1.09	1.38	1.31	1.03	11.75
5	0.85	3.46	12.15	17.13	1.17	0.88	1.73	1.56	1.29	15.57
6	0.99	5.26	18.23	20.36	1.27	1.26	1.82	1.35	1.31	10.17
7	0.92	3.10	28.72	15.27	1.46	1.51	2.02	1.97	1.63	6.71
8	0.84	4.35	12.56	18.79	1.88	1.16	1.99	1.62	1.75	8.00
9	0.93	5.39	23.20	21.93	1.65	1.16	2.55	2.07	1.88	9.20
10	0.93	5.08	48.17	16.61	1.63	1.16	2.42	2.12	1.87	44.33
11	0.93	5.16	13.90	16.17	2.01	1.14	2.33	2.54	1.69	12.35
12	1.01	5.31	21.97	21.06	1.65	1.32	2.76	2.11	1.76	8.18
13	0.75	4.55	13.21	28.74	2.19	1.41	2.69	2.69	2.04	6.11
14	0.81	3.76	29.04	22.31	1.86	1.30	3.02	2.89	2.40	10.36
15	0.81	4.97	15.76	35.21	2.05	1.46	2.50	2.83	2.59	14.73
16	0.82	5.04	20.05	31.56	2.61	1.37	2.55	2.52	3.31	16.70
17	0.77	3.97	23.51	20.14	2.19	1.30	2.45	2.94	2.54	12.68
18	0.63	4.63	34.45	13.89	2.03	1.41	3.48	3.21	2.35	15.09
19	0.68	3.80	23.77	35.95	2.00	1.25	2.61	2.19	2.95	13.30
20	0.71	3.85	12.61	31.35	2.95	1.48	2.69	2.31	2.57	13.76
21	0.71	3.58	32.62	21.19	2.25	1.62	2.83	2.37	2.94	8.80
22	0.68	4.47	30.37	27.35	2.13	1.66	2.78	2.78	2.58	10.00
23	0.62	3.50	32.20	11.33	2.36	1.60	2.38	2.65	2.60	9.02
24	0.66	4.95	23.43	26.70	2.49	1.57	2.66	3.36	2.65	20.98
25	0.61	4.06	23.55	31.72	2.31	1.50	2.77	3.13	3.08	15.13
26	0.67	4.66	17.75	19.41	1.98	1.43	2.38	2.57	3.10	10.46
27	0.60	4.20	14.02	13.56	2.33	1.53	2.91	2.17	2.15	12.83
28	0.55	3.01	24.34	21.81	2.56	1.34	3.05	2.20	2.90	9.86
29	0.54	4.98	30.77	11.17	1.96	1.36	2.45	2.49	2.29	11.33
30	0.57	3.48	13.08	14.49	2.26	1.48	2.38	2.45	2.59	28.38
31	0.63	4.18	13.23	20.16	2.03	1.49	2.27	2.56	2.46	9.05
32	0.33	1.78	8.56	16.63	1.06	0.83	1.03	0.98	1.19	15.10
33	0.54	3.98	21.11	12.50	2.20	1.41	2.08	2.41	2.91	21.39
34	0.55	3.41	13.72	22.37	1.58	1.39	2.14	1.92	2.03	14.65
35	0.49	3.63	12.06	22.15	1.93	1.25	1.90	2.02	2.57	7.33
36	0.47	2.84	15.60	17.11	1.74	1.34	2.05	2.24	1.90	8.99
37	0.49	2.76	13.44	20.45	1.87	1.30	2.24	1.73	2.26	12.30
38	0.48	2.89	15.58	23.54	1.53	1.16	2.06	2.56	2.03	11.76
39	0.45	2.65	16.46	29.53	1.87	1.19	2.23	2.00	2.00	9.95
40	0.42	2.75	18.27	21.31	1.95	1.18	1.60	2.05	2.13	10.23
41	0.39	2.74	8.54	16.99	1.68	1.23	1.51	1.66	1.92	11.35
42	0.38	2.20	11.75	10.26	1.27	1.10	1.81	1.59	1.85	11.25
43	0.42	2.02	9.04	10.68	1.42	1.04	1.73	1.45	1.49	7.28
44	0.37	2.25	11.09	14.12	1.21	0.94	1.51	1.70	1.44	8.83
45	0.28	2.55	13.03	10.22	1.15	0.96	1.35	1.47	1.21	8.75
46	0.27	3.13	4.85	7.55	1.10	0.90	1.35	1.39	1.27	10.31
47	0.27	2.65	5.07	8.45	0.99	0.91	1.32	1.27	1.16	6.30
48	0.33	2.12	4.99	9.17	0.70	0.75	0.87	1.16	1.21	28.63
49	0.39	2.57	7.53	4.70	0.84	0.77	0.77	0.81	0.89	6.04
50	0.62	3.33	6.43	4.91	0.56	0.71	0.70	0.57	0.65	3.70

TABLE A1(a).—Continued.

BASELINE INLET, STATION 3

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1		6.97	1.80	0.00	33.20	0.00	13.39	0.00	0.00	0.00
2		5.68	2.68	0.00	0.00	0.00	4.48	0.00	0.66	20.91
3		9.48	0.00	28.26	0.00	55.62	4.86	7.34	0.20	13.69
4		0.00	0.00	25.72	21.66	284.96	32.14	16.31	0.34	53.30
5		0.00	0.00	0.00	0.00	0.00	0.00	59.30	10.89	0.00
6		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.88
7		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8		0.00	0.00	0.00	13.15	3.13	11.62	0.00	0.00	0.00
9		0.00	14.31	15.61	7.76	9.40	7.09	7.59	10.11	0.00
10		48.17	12.40	10.25	14.21	5.87	4.33	3.62	8.82	0.00
11		31.91	21.33	12.71	17.49	4.24	5.17	3.85	8.62	109.28
12		65.37	14.13	11.18	14.86	2.94	4.05	3.42	4.29	51.95
13		63.84	14.71	16.21	8.92	1.87	3.59	3.65	4.71	120.57
14		95.45	11.06	11.10	9.42	2.18	3.97	3.21	8.17	128.52
15		56.28	18.58	13.12	15.11	2.09	3.82	3.53	12.46	16.25
16		156.81	16.72	23.30	20.42	2.63	4.27	2.82	10.39	63.00
17		21.53	26.21	15.62	11.55	2.63	3.75	3.19	4.85	86.72
18		58.89	15.50	19.38	17.15	2.43	3.59	3.63	14.72	148.08
19		60.18	11.13	18.02	12.52	2.64	3.43	4.31	10.42	33.60
20		29.37	18.48	22.65	16.68	2.51	3.18	4.02	5.51	15.27
21		63.74	4.14	16.53	9.25	2.41	3.90	3.71	14.38	159.96
22		152.27	17.89	12.29	14.78	2.76	4.30	3.92	14.67	11.81
23		19.37	28.54	18.31	14.99	2.29	3.81	3.53	9.26	62.49
24		37.89	24.76	12.04	18.11	2.60	2.99	4.01	7.29	14.95
25		16.32	11.89	11.97	18.67	2.48	3.87	4.18	6.41	140.00
26		139.13	13.19	17.10	19.24	2.02	3.11	3.14	13.01	130.63
27		42.52	15.39	12.28	14.18	2.30	4.08	2.74	6.29	10.76
28		19.15	14.26	8.29	7.98	1.39	1.67	1.89	3.83	17.08
29		28.11	13.49	9.59	11.91	1.91	2.83	3.23	13.07	32.86
30		23.64	13.34	11.31	10.91	1.85	3.29	3.54	6.63	16.84
31		27.88	9.26	10.05	12.73	1.81	2.96	2.77	9.88	0.00
32		17.10	10.89	8.53	11.50	2.40	3.45	2.84	10.79	11.97
33		25.64	9.80	8.79	14.86	2.04	3.20	2.79	7.11	29.69
34		16.02	9.81	10.31	8.87	1.84	3.17	2.30	9.94	49.89
35		14.99	9.47	19.81	9.78	1.59	2.78	2.63	6.70	87.53
36		19.31	8.09	9.28	10.75	1.67	2.75	2.37	7.36	11.82
37		11.60	10.95	11.11	10.11	1.71	2.69	2.05	8.13	20.30
38		9.05	11.40	9.59	7.43	1.72	2.89	2.41	8.79	19.95
39		18.29	12.39	10.08	6.94	1.75	2.12	2.35	6.61	20.16
40		13.23	12.31	8.62	9.08	1.29	2.36	1.92	12.18	29.94
41		14.63	9.24	6.45	7.78	1.46	2.46	2.05	6.77	29.44
42		10.67	7.42	8.65	7.03	1.50	2.48	2.07	6.63	20.66
43		11.91	8.55	5.92	5.73	1.60	2.09	1.93	4.23	116.33
44		13.38	9.48	7.89	9.48	1.71	1.98	2.02	5.03	19.83
45		14.42	17.61	7.31	7.24	1.66	1.76	1.83	4.06	15.35
46		107.32	12.26	29.45	12.53	4.09	2.05	1.83	4.85	29.47
47		0.00	25.30	0.00	20.93	7.95	2.52	1.82	6.50	49.68
48		0.00	134.99	0.00	125.82	17.39	4.43	3.78	6.03	90.56
49		0.00	0.00	0.00	0.00	0.00	29.05	12.42	31.16	0.00
50		8.64	11.80	0.00	0.00	0.00	111.98	40.12	0.00	0.00

BASELINE INLET, STATION 4

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	0.00	0.00	0.00	0.00	0.00	24.80	41.43	9.34	6.05	45.15
2	0.00	0.00	0.00	39.97	1.97	7.84	12.39	8.76	7.94	14.48
3	0.00	0.00	30.67	15.80	1.22	10.01	17.90	5.99	6.73	29.63
4	46.49	15.38	19.79	13.11	0.96	5.59	9.99	4.46	3.55	25.57
5	34.47	6.89	9.89	16.85	0.63	4.45	8.64	5.34	4.89	16.57
6	13.62	5.24	3.61	3.65	0.27	1.67	4.39	1.98	2.05	9.27
7	54.26	8.85	6.57	6.68	0.45	2.97	7.98	3.72	4.10	9.57
8	20.64	6.17	5.27	4.75	0.42	2.85	6.53	3.50	3.81	11.91
9	9.32	6.51	5.80	4.28	0.41	1.98	6.41	3.67	2.43	9.81
10	14.72	8.26	3.74	3.96	0.38	1.91	6.76	2.38	2.60	7.31
11	11.25	5.44	3.95	3.17	0.36	2.84	6.12	3.15	2.41	9.59
12	20.80	4.45	3.80	3.44	0.34	1.95	5.09	2.25	2.71	9.27
13	13.45	3.51	3.19	2.50	0.32	2.03	4.23	3.34	1.91	5.49
14	11.81	3.58	3.00	3.02	0.33	1.89	4.53	2.62	2.00	9.43
15	8.63	3.19	2.67	2.45	0.31	1.84	4.63	2.98	2.14	8.54
16	11.23	3.44	2.38	2.09	0.34	1.81	4.28	2.46	1.62	16.38
17	11.66	3.21	1.75	2.20	0.35	1.54	3.54	2.39	1.61	8.49
18	10.51	2.91	1.57	2.03	0.38	1.43	4.30	2.12	1.68	8.85
19	20.86	2.15	1.80	1.86	0.40	1.47	3.69	2.37	1.69	9.06
20	8.55	2.70	1.47	1.60	0.43	1.36	5.05	2.37	1.59	5.64
21	13.48	2.23	1.53	2.03	0.48	1.09	3.99	2.33	1.40	4.78
22	8.07	2.24	1.32	1.69	0.54	1.26	4.10	1.62	1.45	6.21
23	11.00	1.79	1.38	1.75	0.57	1.20	3.01	2.30	1.41	6.75
24	11.51	1.91	1.39	1.77	0.65	1.19	5.30	1.84	1.19	3.59
25	17.79	1.75	1.33	1.60	1.02	1.42	3.41	1.75	1.25	5.83
26	70.86	1.92	1.46	2.08	5.17	1.30	3.83	1.95	1.47	12.04
27	10.97	2.37	1.60	1.81	44.73	1.43	3.06	1.69	1.31	8.43
28	104.46	1.70	1.84	2.33	0.00	1.72	3.53	1.80	1.29	14.94
29	12.69	1.96	2.06	3.10	0.00	1.70	4.79	1.91	1.22	10.31
30	51.60	2.13	2.31	2.73	0.00	2.10	5.00	1.81	1.20	4.04
31	22.68	2.96	3.02	3.44	0.00	2.07	8.92	1.82	1.20	7.14
32	55.43	4.78	4.71	3.76	0.00	2.42	8.59	2.07	1.17	7.14
33	40.79	19.14	6.85	4.88	0.00	2.61	10.76	2.31	1.19	5.47
34	19.04	50.81	25.57	18.65	0.00	3.42	10.99	2.88	1.37	7.57
35	0.00	8.76	0.00	62.76	0.00	3.53	12.34	3.75	1.60	6.76
36	0.00	89.95	0.00	94.68	0.00	8.13	23.06	4.21	1.80	6.19
37	0.00	65.00	91.14	17.68	0.00	18.10	240.35	17.61	2.93	8.02
38	0.00	6.68	3.81	5.49	0.00	0.00	0.00	0.00	4.81	17.03
39	0.00	33.93	4.86	3.97	0.00	0.00	0.00	0.00	1.35	17.92
40	0.00	0.00	0.00	0.00	248.86	65.76	0.00	0.00	0.86	0.00
41	0.00	0.00	0.00	0.00	75.40	0.00	0.00	0.00	6.40	0.00
42	0.00	0.00	0.00	0.00	21.34	0.00	0.00	0.00	0.00	0.00
43	0.00	0.00	0.00	0.00	23.06	0.00	82.86	65.63	8.66	31.56
44	0.00	0.00	0.00	0.00	13.95	9.82	35.66	11.94	0.58	15.63
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.95	11.05
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A1(a).—Continued.

BASELINE INLET, STATION 5

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.28	14.17	20.31
2	0.00	0.00	0.00	0.00	8.95	8.17	7.75	6.15	6.70	16.79
3	0.00	0.00	18.08	18.08	18.47	27.90	6.13	6.74	7.13	29.14
4	2.22	3.56	5.04	14.54	12.67	9.69	5.69	7.83	21.21	9.31
5	1.47	2.87	4.42	9.02	15.18	5.60	4.73	5.47	10.39	11.81
6	1.61	2.58	3.73	6.46	8.61	7.19	5.74	4.86	17.29	10.79
7	1.61	2.54	3.72	6.63	5.24	5.41	4.19	4.78	15.90	13.37
8	1.60	2.34	3.12	4.57	4.85	5.21	4.13	4.12	12.41	7.76
9	1.50	2.68	3.61	5.43	3.78	5.06	3.56	3.87	9.45	12.72
10	1.95	2.59	2.98	3.48	4.79	5.77	4.13	3.87	10.23	8.25
11	2.10	2.43	2.84	3.39	3.19	3.32	3.42	4.47	10.98	10.61
12	2.27	2.39	2.82	3.42	2.84	3.79	3.20	4.02	8.90	8.02
13	2.41	2.16	2.62	3.28	3.26	2.68	3.99	3.04	8.66	4.02
14	2.47	2.32	2.61	2.95	2.81	2.96	3.27	3.23	9.31	4.92
15	2.06	2.30	2.46	2.64	2.74	3.40	3.09	3.51	6.97	5.77
16	3.00	2.02	2.36	2.90	2.38	3.00	3.72	3.43	7.17	6.68
17	2.85	2.17	2.23	2.29	2.44	2.53	3.66	3.35	6.64	6.50
18	3.01	2.36	2.29	2.22	2.33	2.86	3.02	3.61	7.19	7.35
19	2.69	2.14	2.04	1.95	2.09	3.13	2.31	3.20	7.03	4.18
20	3.10	2.49	2.44	2.39	2.14	2.67	2.68	3.24	8.64	4.77
21	3.08	2.74	2.32	2.02	1.89	2.80	2.04	2.73	7.21	3.66
22	3.20	3.32	2.53	2.05	2.17	2.50	2.46	2.76	7.91	4.11
23	2.81	4.58	3.03	2.26	2.14	2.09	2.52	2.38	4.96	11.71
24	3.48	4.26	2.83	2.12	2.48	2.36	2.30	2.55	7.25	3.27
25	3.63	5.27	3.03	2.13	2.09	2.10	2.50	2.60	6.34	3.54
26	3.71	6.75	3.26	2.15	2.22	2.49	2.00	2.16	3.97	3.58
27	4.35	7.04	4.30	3.11	2.24	2.27	2.24	2.26	6.66	4.80
28	5.21	11.53	4.61	2.86	2.33	2.21	2.38	2.15	5.07	3.69
29	5.30	11.97	4.42	2.69	3.58	3.09	2.81	2.56	4.94	9.27
30	5.73	10.44	4.87	3.17	2.74	3.79	3.42	2.60	4.68	4.06
31	6.13	12.54	4.78	2.93	3.96	3.39	4.15	2.64	4.88	8.96
32	6.75	20.05	6.77	4.07	3.80	3.60	3.96	2.48	5.65	4.28
33	8.90	22.37	5.77	3.25	4.01	4.72	4.89	3.80	4.62	5.87
34	7.31	72.68	7.75	3.82	4.93	5.29	5.84	3.98	5.86	6.39
35	6.41	0.00	6.22	6.22	9.50	3.81	5.88	4.12	7.07	6.62
36	7.08	201.26	43.54	19.28	24.01	6.22	8.51	6.65	9.77	7.22
37	31.55	50.13	52.62	55.61	23.85	6.55	48.87	13.65	13.90	4.81
38	0.00	42.12	59.53	90.00	0.00	12.63	31.11	31.24	43.71	4.29
39	0.00	0.00	113.03	169.55	0.00	45.06	105.72	0.00	57.45	3.47
40	0.00	118.26	118.26	0.00	257.76	90.56	0.00	0.00	14.20	7.11
41	0.00	0.00	0.00	0.00	0.00	154.96	0.00	0.00	52.57	48.99
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.96	1.33	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.50	0.36	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

BASELINE INLET, STATION 6

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	6.09	18.98	5.92	3.59	3.31	19.64	7.17
3	6.13	4.30	3.94	5.90	9.26	4.66	3.07	3.13	9.48	4.00
4	4.36	3.04	3.93	3.89	5.73	5.13	2.64	2.42	8.73	3.42
5	4.14	3.78	3.62	4.63	7.86	5.43	2.75	3.34	6.88	4.96
6	4.19	2.72	3.15	3.78	7.65	3.53	2.46	2.33	11.86	7.27
7	3.87	3.01	2.90	3.78	4.45	4.50	2.23	2.51	10.96	3.95
8	3.96	2.51	3.37	4.80	5.55	3.45	2.04	2.15	10.69	9.15
9	3.69	3.95	3.00	2.96	4.20	3.01	2.04	2.23	11.14	17.62
10	3.88	2.35	2.77	4.27	5.67	4.46	1.99	1.93	9.10	5.90
11	4.26	2.38	2.65	2.74	4.07	3.43	2.09	2.44	11.34	3.43
12	4.32	2.58	3.06	3.05	3.42	3.10	2.14	2.16	19.92	3.80
13	3.67	2.89	2.82	3.94	3.68	2.90	1.80	2.23	17.64	4.80
14	3.11	2.26	2.93	4.08	3.80	2.94	2.13	2.13	15.44	6.29
15	2.84	2.78	2.42	2.46	3.63	2.50	1.92	2.04	13.82	7.56
16	2.64	3.11	2.63	3.35	3.16	2.62	1.87	1.98	17.33	5.40
17	3.20	2.07	3.07	2.71	3.52	3.00	2.05	2.07	19.04	3.58
18	2.14	1.97	2.28	3.17	2.95	2.62	1.60	1.92	18.35	3.89
19	2.65	2.19	2.52	2.64	3.25	2.01	1.49	2.12	17.70	5.20
20	2.22	2.36	2.34	2.56	2.50	2.40	1.72	1.75	20.94	7.02
21	1.85	2.59	2.53	2.26	3.10	2.96	1.55	1.69	10.68	8.49
22	2.42	2.53	2.23	2.29	3.00	2.15	1.35	1.83	19.26	8.05
23	1.84	2.89	2.39	2.27	2.64	2.12	1.57	1.75	12.64	5.08
24	1.97	3.39	2.71	2.39	2.71	2.19	1.32	1.69	15.67	5.47
25	2.15	2.99	3.18	2.55	2.47	2.14	1.37	1.60	12.62	7.27
26	2.07	3.37	3.12	3.28	2.51	2.35	1.43	1.47	11.72	4.94
27	1.34	2.36	1.98	1.48	1.50	1.46	0.76	0.92	11.47	2.97
28	2.55	4.50	3.96	2.72	2.67	2.71	1.36	1.30	19.82	9.91
29	3.32	4.39	4.66	3.23	2.42	2.59	1.46	1.34	19.38	8.64
30	3.28	6.71	4.95	3.33	2.56	3.07	1.20	1.44	8.43	4.42
31	4.38	8.50	5.72	4.30	3.21	3.78	1.37	1.28	15.88	4.48
32	5.92	6.98	7.45	5.26	2.90	3.95	1.51	1.30	12.09	5.34
33	6.42	11.33	16.69	6.35	3.94	3.99	1.48	1.60	11.59	4.79
34	10.40	14.53	13.74	7.09	4.05	7.51	1.59	1.45	15.42	3.20
35	9.58	37.91	18.08	9.72	4.22	13.99	2.03	2.06	7.85	3.40
36	13.07	0.00	35.35	11.29	5.43	15.58	2.08	2.07	11.91	2.17
37	7.53	143.87	21.82	11.89	4.27	28.24	2.32	1.92	5.34	1.47
38	7.80	0.00	0.00	11.80	6.20	110.97	2.55	2.00	4.40	1.23
39	69.45	0.00	243.14	32.13	14.52	57.94	7.72	4.48	7.13	1.39
40	0.00	0.00	0.00	0.00	38.54	0.00	28.61	7.47	26.48	2.14
41	0.00	0.00	0.00	245.98	0.00	228.91	38.59	97.88	183.95	2.45
42	0.00	214.94	0.00	240.35	237.34	29.74	4.48	2.14	123.24	4.01
43	0.00	151.41	97.56	66.28	0.00	21.84	1.50	2.53	12.73	1.08
44	0.00	128.96	51.51	237.34	0.00	14.45	3.01	4.38	11.39	0.93
45	0.00	0.00	0.00	0.00	0.00	10.91	4.71	3.59	7.94	3.20
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A1(a).—Continued.

BASELINE INLET, STATION 7

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	11.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	3.92	6.90	40.70	18.34	5.84	10.07	4.62	3.72	3.41	0.00
4	0.00	6.21	14.39	14.32	6.71	5.40	3.48	4.90	3.65	3.24
5	0.00	6.23	10.90	8.37	5.13	4.52	5.12	2.38	5.74	3.89
6	3.09	5.65	7.88	9.66	4.40	4.46	4.16	3.02	4.33	2.89
7	84.59	3.02	6.63	4.91	3.19	3.43	4.45	3.13	3.02	2.48
8	32.22	3.88	5.60	5.62	3.14	2.99	3.23	3.29	3.82	3.90
9	46.77	2.98	7.31	6.42	3.13	3.56	2.70	3.00	3.39	3.00
10	11.32	2.01	7.60	4.81	2.69	3.27	3.17	2.39	2.91	4.50
11	7.34	2.57	6.37	4.62	2.46	2.69	2.47	3.03	2.83	3.87
12	15.52	2.22	5.71	4.77	2.58	2.34	3.05	2.38	2.53	2.67
13	130.16	2.20	7.69	3.59	2.04	2.52	2.41	2.53	2.91	3.50
14	33.76	2.11	7.94	3.43	2.23	2.32	2.32	2.17	3.16	4.09
15	11.41	1.80	5.71	4.45	2.18	2.31	2.23	2.68	2.73	3.19
16	20.54	1.92	5.38	4.16	1.89	1.98	2.41	2.63	2.36	4.07
17	13.82	1.97	5.27	3.56	2.08	2.31	1.98	1.93	2.13	3.58
18	4.06	1.92	5.15	4.29	2.04	2.24	2.35	2.29	2.14	5.10
19	45.75	1.73	6.50	3.64	2.30	1.76	2.29	1.97	2.10	3.91
20	231.71	0.66	3.55	2.38	1.09	1.30	1.36	1.18	1.18	2.26
21	49.23	1.99	5.35	3.22	2.00	2.08	2.36	2.05	2.49	2.72
22	10.29	2.23	6.39	3.68	1.79	1.87	1.84	1.93	2.26	4.68
23	4.96	2.02	4.89	2.75	1.73	1.84	1.80	2.06	1.83	3.79
24	0.89	1.95	5.44	3.88	1.94	1.76	1.92	2.08	2.12	4.55
25	226.15	1.64	5.08	3.59	1.72	1.60	1.85	1.99	1.91	3.44
26	0.51	1.61	5.05	3.95	1.61	1.94	1.68	1.68	1.96	4.64
27	3.18	1.91	6.55	4.08	1.92	1.56	1.71	1.88	1.92	4.66
28	6.67	1.73	4.90	3.37	1.70	1.82	1.78	1.62	1.74	4.69
29	24.07	1.68	5.55	3.14	1.81	1.79	1.58	1.92	1.63	3.38
30	12.73	1.67	5.50	3.85	1.65	2.05	1.68	1.62	1.84	5.27
31	12.95	1.63	4.36	3.02	1.75	1.62	1.70	1.55	1.47	3.87
32	9.79	1.78	5.53	3.65	1.68	1.65	1.39	1.97	1.66	4.53
33	39.19	1.51	5.11	3.23	1.60	1.64	1.47	1.90	1.70	3.06
34	11.05	1.62	4.24	2.92	1.78	1.60	1.53	1.47	1.61	3.47
35	2.19	1.79	4.23	3.08	1.91	1.32	1.46	1.80	1.52	3.08
36	2.83	1.74	4.20	3.39	1.73	1.30	1.46	1.88	1.52	3.08
37	1.25	1.75	4.60	3.49	1.33	1.53	1.40	1.48	1.39	2.75
38	2.64	1.63	5.38	3.60	1.56	1.32	1.58	1.77	1.61	2.70
39	5.02	1.83	5.44	3.27	1.59	1.26	1.23	1.66	1.50	2.42
40	1.39	1.52	5.25	3.32	1.49	1.46	1.38	1.72	1.31	1.93
41	1.92	1.12	5.32	4.13	1.74	1.92	1.30	1.46	1.28	1.72
42	1.32	1.93	12.99	4.82	1.93	2.48	2.31	1.37	1.03	1.28
43	0.31	3.14	16.97	8.10	4.01	5.71	3.56	3.07	1.15	1.01
44	0.35	0.32	56.33	29.39	10.58	11.89	6.56	3.67	5.13	1.85
45	0.21	0.54	0.00	0.00	14.06	15.55	9.99	5.49	7.43	2.58
46	0.30	0.28	0.00	0.00	24.51	13.98	5.71	3.25	2.93	4.56
47	0.38	13.34	0.00	32.97	10.30	9.15	12.46	2.96	3.52	2.82
48	1.11	6.55	273.21	116.58	25.15	5.82	10.94	6.19	3.23	3.29
49	0.00	0.00	3.00	0.00	15.23	13.75	3.67	3.77	4.85	3.67
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60

BASELINE INLET, STATION 9

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	2.82	0.30	6.21	7.17	36.31	12.87	6.26	4.13	3.04	1.00
2	4.57	19.41	4.41	6.49	12.96	5.70	4.49	4.67	2.74	1.22
3	32.51	15.63	3.84	3.13	21.49	6.84	5.55	4.47	3.01	1.94
4	0.00	10.97	1.40	3.47	9.74	9.73	3.08	3.27	3.15	1.78
5	0.00	15.99	1.67	2.37	21.34	7.00	3.27	4.27	2.77	1.32
6	0.00	18.39	1.07	2.14	4.46	6.29	3.37	5.63	4.31	1.51
7	0.00	18.51	1.95	2.36	10.87	6.53	3.78	5.62	3.36	1.41
8	0.00	24.63	2.69	3.81	10.29	6.67	4.01	3.32	3.83	1.32
9	49.29	14.15	1.74	2.05	8.26	6.95	3.16	4.29	3.33	1.93
10	0.00	5.98	1.18	1.84	5.44	5.33	2.90	2.99	2.23	1.48
11	0.00	5.27	1.06	1.30	4.89	3.29	3.73	2.69	2.42	2.16
12	0.00	6.66	1.12	2.03	3.86	5.36	3.18	2.58	4.39	1.92
13	0.00	6.65	0.81	1.29	5.19	4.40	3.52	3.11	3.65	1.72
14	0.00	4.36	0.74	1.28	5.27	2.87	2.45	3.86	3.89	1.93
15	0.00	6.74	0.56	1.40	4.46	3.51	1.97	2.73	2.97	2.35
16	0.00	4.38	1.02	1.18	3.63	3.60	2.64	2.80	3.19	2.30
17	0.00	4.06	0.69	1.41	3.60	3.21	3.02	2.69	2.64	1.89
18	0.00	5.24	0.42	0.58	1.31	1.51	1.49	1.49	1.51	1.51
19	0.00	3.35	0.50	1.21	3.35	2.28	2.67	2.43	2.76	2.08
20	0.00	4.11	1.05	1.14	2.71	3.57	2.01	2.72	2.72	2.19
21	0.00	3.23	0.73	1.44	2.84	3.30	2.25	2.19	2.50	2.88
22	0.00	4.29	0.79	1.36	3.18	2.78	2.93	2.49	2.53	3.79
23	0.00	3.81	0.66	1.22	3.17	3.05	2.45	2.49	2.65	2.16
24	0.00	2.73	0.78	1.06	3.37	2.97	2.20	2.14	2.79	2.87
25	0.00	4.57	0.87	1.09	2.21	2.43	2.15	2.23	3.01	3.76
26	0.00	4.17	0.72	1.59	3.30	2.53	1.96	2.42	3.18	2.62
27	0.00	3.41	0.62	1.02	2.76	2.46	2.55	2.07	2.57	2.53
28	0.00	2.54	0.79	0.87	3.22	2.81	1.86	2.49	2.34	3.15
29	0.00	4.74	0.64	0.93	2.58	2.29	2.32	2.31	2.34	2.23
30	0.00	2.16	0.66	1.03	3.43	2.17	2.01	2.12	2.33	2.38
31	0.00	3.32	0.59	0.90	2.43	3.76	2.09	1.79	2.62	2.93
32	0.00	4.09	0.65	1.03	2.44	2.83	2.00	2.51	2.41	3.11
33	0.00	2.77	0.69	1.50	2.62	2.37	1.97	2.15	2.53	2.47
34	0.00	3.45	0.62	1.02	3.02	2.65	1.90	1.93	2.11	2.76
35	0.00	3.80	0.58	1.49	2.77	2.50	2.19	2.24	2.37	2.33
36	10.64	3.03	0.64	0.90	2.26	2.35	1.94	1.70	2.63	2.61
37	15.00	2.17	0.61	1.09	2.43	3.01	1.75	2.14	2.16	2.53
38	3.23	2.39	0.59	1.08	2.44	2.45	1.94	1.79	2.01	2.15
39	4.57	4.30	0.51	0.91	1.99	1.93	1.81	1.76	1.79	1.94
40	5.42	1.95	0.40	0.73	2.11	2.00	1.63	1.77	1.92	1.83
41	7.32	4.37	0.33	0.63	1.79	1.52	1.62	1.83	1.95	1.66
42	9.36	1.40	0.17	0.54	1.39	1.54	1.37	1.85	2.05	1.29
43	4.22	0.99	0.09	0.30	1.07	0.87	1.26	1.16	1.19	1.22
44	0.63	0.50	0.07	0.22	0.69	0.47	0.91	0.91	1.02	0.88
45	0.36	0.67	0.10	0.22	0.48	0.37	0.74	0.77	0.67	0.65
46	0.22	0.73	0.22	0.39	0.46	0.34	0.63	0.66	0.48	0.39
47	0.33	1.12	1.40	1.08	0.94	0.71	0.87	0.67	0.52	0.40
48	0.53	1.21	3.29	2.24	4.34	1.76	1.66	0.84	0.66	0.44
49	0.90	25.75	35.31	6.45	7.07	2.37	3.09	1.37	1.13	0.62
50	1.33	85.14	1.09	4.26	36.41	10.65	4.51	4.07	1.89	0.66

TABLE A1(a).—Continued.

ENHANCED INLET, STATION 1

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	2.60	3.03	3.27	3.01	3.09	2.88	3.68	2.59	2.99	4.28
2	2.96	3.57	3.04	2.69	3.48	2.80	2.82	3.11	2.57	5.14
3	4.17	3.45	2.71	2.80	2.96	3.30	2.54	2.76	3.32	6.43
4	4.70	2.46	2.71	2.48	3.75	2.83	2.53	2.40	3.34	5.41
5	2.37	2.74	2.22	2.77	3.27	2.89	2.63	2.75	2.51	4.49
6	2.53	2.49	2.41	2.48	4.15	3.52	2.99	2.27	2.16	6.43
7	2.45	2.73	3.20	2.51	2.81	2.82	3.36	2.99	2.66	6.53
8	3.99	2.95	2.78	2.33	3.08	2.79	3.45	2.26	2.48	4.70
9	2.16	2.57	2.74	2.70	4.31	2.63	2.68	2.73	2.44	3.78
10	2.70	2.69	2.47	2.58	2.74	2.51	2.73	2.47	2.42	6.35
11	3.19	2.59	2.46	2.31	3.83	2.86	2.38	2.92	2.57	4.78
12	2.52	2.37	2.78	2.46	3.18	3.21	2.87	2.94	3.05	3.76
13	2.26	2.51	2.80	3.52	2.67	2.65	3.45	2.79	3.01	4.21
14	3.53	2.82	2.46	2.91	2.68	3.53	2.98	2.72	2.41	5.15
15	2.46	3.03	2.53	2.19	3.04	3.01	2.68	2.55	3.54	4.99
16	2.36	2.74	2.85	2.93	3.45	2.88	3.14	2.55	2.70	5.70
17	2.43	2.44	2.16	2.64	3.83	2.45	3.13	2.61	2.89	4.69
18	2.93	3.14	2.99	2.96	3.96	2.43	3.11	2.15	2.66	4.41
19	3.08	2.50	2.02	2.56	2.54	2.63	2.81	3.16	2.16	5.83
20	4.18	3.39	3.22	2.39	3.49	2.86	2.55	2.40	2.58	5.46
21	2.34	2.17	2.35	3.06	2.95	2.52	2.86	2.90	2.89	6.15
22	2.72	2.83	2.49	2.74	3.27	2.44	3.05	2.82	2.70	4.22
23	3.16	2.94	2.96	2.23	3.12	3.07	2.87	2.17	2.72	5.51
24	3.09	2.65	2.92	1.91	3.58	3.21	2.91	2.88	3.39	6.83
25	3.51	2.72	2.75	2.86	3.24	3.80	2.65	3.23	3.29	5.57
26	2.65	2.54	2.61	2.93	3.52	2.59	2.88	2.22	2.96	6.62
27	2.19	2.56	3.17	3.74	3.04	3.03	2.91	2.69	2.92	6.55
28	2.87	2.82	2.46	3.60	3.31	2.99	2.66	2.21	2.78	5.14
29	3.20	3.02	2.62	2.74	2.83	2.69	4.25	3.27	2.89	4.93
30	2.47	2.75	2.63	2.69	3.17	2.59	2.67	2.46	2.37	5.26
31	2.82	2.52	2.45	3.39	3.98	2.63	3.30	2.75	3.35	5.56
32	4.36	2.89	2.96	2.47	3.59	3.23	2.66	2.92	2.82	5.89
33	2.29	2.78	3.07	3.56	2.95	3.06	3.22	2.34	3.60	5.70
34	3.40	2.33	2.53	2.35	2.92	2.99	3.29	2.73	2.63	4.28
35	2.21	3.04	2.81	2.52	4.00	2.61	4.24	3.38	2.23	5.47
36	3.99	2.29	2.38	2.57	3.58	2.64	3.46	2.76	2.98	5.18
37	2.57	2.72	3.32	3.01	2.93	2.37	2.65	2.82	2.89	3.63
38	3.00	2.91	2.37	3.22	3.90	2.81	2.53	3.02	2.69	5.77
39	2.76	2.93	2.34	2.80	3.01	2.89	3.17	3.08	2.58	7.05
40	2.52	2.64	2.96	2.37	3.81	2.45	2.82	2.76	3.20	5.32
41	3.00	2.66	2.96	2.59	4.36	2.54	3.22	2.65	2.40	8.05
42	2.98	2.65	2.76	1.99	2.83	3.04	2.27	2.82	3.46	4.79
43	3.29	2.67	2.30	2.77	2.97	3.62	2.54	2.52	2.62	5.30
44	2.77	2.48	2.99	2.56	3.20	3.12	3.02	2.89	3.16	7.15
45	3.31	2.61	3.21	2.75	3.20	3.30	2.24	3.05	2.36	4.84
46	3.37	2.20	3.05	2.61	3.14	3.56	2.79	2.59	3.39	8.28
47	2.71	2.35	2.37	2.31	3.15	2.81	3.10	2.92	3.12	8.37
48	3.26	2.91	2.66	2.33	3.75	3.00	3.01	2.59	3.07	6.30
49	3.74	2.99	2.68	2.50	3.31	2.95	2.70	2.42	2.70	4.71
50	1.21	1.29	1.79	1.68	2.45	1.78	2.04	1.57	1.33	2.73

ENHANCED INLET, STATION 2

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	2.38	1.41	0.92	1.16	1.15	1.20	1.25	1.65	1.23	4.97
2	3.47	1.83	1.99	1.29	0.82	0.78	0.75	1.05	0.80	4.59
3	3.14	1.61	1.75	2.00	1.70	1.55	1.42	0.81	0.70	3.83
4	3.42	1.93	1.94	1.69	2.32	2.39	2.47	2.12	1.31	7.91
5	2.95	2.23	1.62	2.29	2.04	2.53	2.35	2.95	1.39	5.59
6	3.22	2.44	1.98	2.30	2.92	2.09	2.37	2.33	1.37	8.65
7	3.62	2.36	2.13	2.44	3.22	3.55	3.97	2.82	1.36	5.12
8	4.17	3.01	2.12	2.64	3.08	3.66	4.56	2.10	2.52	4.06
9	3.73	2.95	2.44	3.18	3.80	3.93	4.08	2.50	1.91	8.21
10	4.20	4.11	2.97	2.84	3.18	3.62	4.22	3.40	1.90	8.92
11	3.83	3.76	2.15	4.05	3.53	3.75	4.00	3.20	2.73	8.19
12	2.39	4.62	3.46	3.67	3.16	3.81	4.83	4.21	2.82	10.99
13	3.93	5.24	3.18	4.23	4.67	4.52	4.38	3.66	4.09	16.74
14	3.09	3.96	4.36	4.29	3.45	3.94	4.63	3.96	2.94	7.10
15	4.83	4.49	2.85	4.25	4.92	4.42	3.99	3.29	3.38	8.48
16	3.47	4.18	3.54	3.66	5.03	4.42	3.93	4.12	4.07	15.98
17	3.78	3.18	4.05	3.89	3.75	4.48	5.58	5.37	3.34	8.70
18	3.24	3.98	3.42	4.48	4.46	4.53	4.59	3.37	3.93	25.64
19	3.16	4.69	3.95	3.81	4.88	4.69	4.51	4.71	4.69	13.05
20	3.59	5.00	4.21	5.10	4.55	4.77	5.00	4.87	3.86	16.88
21	3.74	4.57	3.56	4.87	5.11	4.96	4.92	4.77	5.16	14.21
22	4.55	3.88	3.46	4.88	5.08	4.83	4.60	4.50	4.66	21.03
23	3.24	3.38	3.60	4.79	4.46	5.02	5.75	4.93	5.00	25.19
24	3.38	4.34	3.34	6.94	6.12	5.11	4.38	3.41	4.90	48.01
25	3.01	3.68	4.54	4.75	6.20	5.98	5.77	4.67	4.79	12.84
26	3.43	4.25	4.06	4.51	4.44	5.38	6.79	4.08	4.28	21.33
27	3.09	3.95	3.78	5.10	5.11	4.83	4.53	4.95	3.37	17.30
28	2.61	4.14	3.76	4.95	4.83	4.49	6.21	3.90	4.35	21.82
29	2.79	3.64	3.54	4.50	3.98	3.97	3.95	4.86	4.18	16.92
30	3.44	3.90	4.74	5.25	4.15	4.51	4.93	3.55	3.62	15.97
31	2.55	3.99	3.85	4.10	4.10	4.03	3.97	4.85	4.29	28.32
32	1.61	1.62	1.49	2.70	2.57	2.62	2.66	2.52	2.64	12.46
33	2.42	3.79	4.02	4.44	4.74	4.36	4.04	4.17	3.16	16.12
34	2.30	3.63	3.86	5.12	3.52	4.01	4.66	3.55	3.79	24.70
35	2.64	2.60	3.26	3.99	3.55	3.81	4.11	4.54	4.04	13.54
36	2.13	2.59	2.99	5.19	3.93	4.09	4.26	3.98	3.04	13.83
37	2.35	3.43	2.83	4.35	3.13	3.39	3.71	3.04	3.74	12.00
38	2.00	2.45	3.24	3.53	3.64	3.53	3.42	3.35	3.33	19.49
39	2.61	2.69	3.09	3.62	3.38	3.36	3.34	3.41	3.49	5.37
40	2.04	2.17	2.95	3.98	3.59	3.41	3.26	2.88	2.77	7.57
41	2.28	2.18	2.82	3.36	3.68	3.52	3.37	2.70	2.73	10.17
42	1.65	2.37	2.08	2.73	3.57	3.42	3.29	2.96	3.27	11.93
43	1.62	1.94	1.80	2.99	3.21	3.08	2.96	2.82	2.79	6.11
44	1.53	1.90	1.99	2.53	2.58	2.75	2.93	2.82	2.55	19.00
45	1.50	1.71	2.41	2.09	2.10	2.21	2.33	2.40	2.50	10.14
46	1.54	1.62	1.48	1.93	2.41	2.56	2.71	2.12	3.05	9.77
47	1.13	1.47	1.41	1.83	2.24	2.20	2.15	2.24	1.81	9.28
48	1.19	1.23	1.15	1.62	1.75	1.99	2.30	1.94	2.17	7.37
49	0.91	1.06	0.83	1.27	1.39	1.67	2.07	1.92	1.63	8.11
50	1.09	0.99	0.86	0.98	1.65	1.58	1.52	1.39	1.48	7.42

TABLE A1(a).—Continued.

ENHANCED INLET, STATION 3

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.26
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.06
3	0.00	159.86	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.76	1.47	0.36	0.44	0.44	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.49	1.30
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.43
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	11.05	91.46	29.33	0.00	0.00	0.00
9	18.60	0.00	36.37	16.79	10.16	15.51	9.84	223.54	5.99	0.00
10	22.81	185.70	53.92	28.30	8.14	11.06	4.12	19.71	8.27	62.16
11	12.24	183.10	56.80	18.83	8.51	13.18	3.47	7.50	5.66	125.05
12	12.59	20.31	59.48	18.51	6.53	7.19	3.57	8.60	3.63	18.92
13	6.01	71.03	25.53	7.01	5.64	6.62	2.38	10.64	8.40	27.46
14	3.52	13.63	16.83	8.01	7.08	7.57	2.51	7.24	5.09	14.74
15	8.78	10.99	14.96	8.72	5.02	6.04	2.45	9.71	5.14	18.51
16	18.39	9.96	11.71	12.67	7.47	4.72	2.20	7.77	3.80	41.37
17	3.62	11.31	9.69	9.17	6.69	5.31	2.41	7.03	4.63	0.30
18	3.94	11.12	15.96	13.90	4.61	6.62	2.31	11.16	3.60	25.76
19	4.25	11.29	13.18	9.21	4.25	3.85	2.48	13.44	3.93	10.81
20	5.96	38.61	15.53	8.96	5.56	4.87	2.13	8.22	5.87	9.85
21	4.35	16.18	12.88	10.50	4.10	5.29	2.46	8.74	5.25	13.20
22	2.32	12.39	15.94	7.44	4.37	4.47	2.43	9.42	5.70	38.05
23	2.70	11.79	15.59	8.14	4.95	5.04	2.36	11.41	4.68	14.87
24	3.32	13.60	11.87	9.26	4.92	4.37	2.03	8.06	3.93	11.81
25	4.19	18.92	12.94	8.03	4.72	5.00	2.12	8.29	3.90	23.73
26	4.36	12.04	12.74	8.51	3.86	4.29	2.06	8.74	5.41	29.29
27	3.36	37.22	11.43	7.69	5.00	3.73	1.94	8.75	3.79	16.33
28	5.02	9.12	6.68	5.04	2.23	2.92	1.23	5.43	2.37	7.97
29	8.66	14.67	11.91	6.91	4.12	3.66	1.58	9.43	4.39	10.52
30	5.42	11.64	8.36	8.43	3.70	3.34	1.68	9.81	3.40	8.18
31	3.19	9.36	11.62	8.44	4.01	3.47	1.75	6.54	4.15	189.66
32	3.46	10.82	12.43	8.56	3.54	3.28	1.60	7.59	3.84	11.93
33	1.85	10.69	10.64	6.30	3.40	3.09	1.40	7.26	2.96	24.51
34	2.96	10.54	7.56	9.30	3.84	3.72	1.35	9.17	2.92	17.72
35	2.87	12.57	7.49	6.26	3.20	4.18	1.39	6.11	2.76	23.86
36	4.96	8.27	6.44	5.27	3.45	3.94	1.51	7.28	3.37	66.73
37	3.07	9.06	6.25	5.45	2.93	2.96	1.23	6.03	3.40	100.81
38	3.03	9.06	6.30	4.90	3.01	3.14	1.24	7.67	2.30	22.86
39	5.21	9.06	6.09	5.20	2.98	2.63	1.03	7.51	2.87	15.59
40	4.41	9.11	6.34	6.09	2.67	2.46	1.33	5.95	3.06	12.56
41	7.83	23.94	6.84	6.35	2.17	2.69	1.00	7.05	2.01	12.53
42	4.69	10.24	5.39	5.22	2.26	2.28	1.07	5.92	2.31	22.65
43	20.00	12.15	4.61	3.85	2.14	2.44	1.01	4.34	2.09	13.52
44	10.63	123.42	4.40	3.53	2.21	1.97	0.87	4.80	2.56	13.44
45	3.65	0.00	4.15	3.50	2.12	1.94	0.88	5.29	1.82	19.51
46	5.73	0.00	3.15	3.04	2.02	2.05	0.82	3.91	1.62	18.25
47	42.51	0.00	3.79	3.49	1.95	2.35	0.90	3.40	1.96	10.38
48	0.00	0.00	21.34	13.69	5.35	7.81	0.92	4.08	1.67	5.54
49	0.00	0.00	0.00	0.00	78.96	7.03	1.25	3.65	1.72	10.54
50	0.00	0.00	0.00	0.00	0.00	0.00	11.49	12.17	5.87	15.85

ENHANCED INLET, STATION 4

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	0.00	0.00	0.00	0.00	0.00	13.67	14.26	36.69	7.53	0.00
2	0.00	0.00	0.00	0.00	0.00	13.97	7.34	7.82	3.11	0.00
3	0.00	0.00	131.40	0.00	0.00	7.23	4.92	9.21	3.94	0.00
4	0.00	77.33	0.00	0.00	111.21	5.51	4.43	8.24	4.47	0.00
5	0.00	0.00	23.21	240.18	27.59	4.93	4.72	6.36	7.49	20.17
6	0.00	67.24	22.91	95.99	20.69	2.25	2.12	2.97	2.77	24.63
7	0.00	22.87	29.38	48.98	23.98	3.37	3.15	4.62	10.85	24.68
8	0.00	20.03	9.94	24.44	21.54	3.18	4.05	4.73	5.18	0.00
9	50.54	13.59	6.74	50.18	14.64	2.88	3.86	4.02	3.71	67.15
10	0.00	9.66	5.08	15.52	10.26	2.96	2.85	4.18	3.76	30.25
11	15.49	10.87	5.54	24.37	15.10	2.87	3.24	3.76	4.81	8.52
12	54.34	10.15	4.11	18.79	7.24	2.44	3.43	3.77	3.47	9.83
13	0.00	11.40	4.33	15.60	9.05	2.64	3.13	4.08	5.99	20.91
14	14.69	11.23	5.04	10.85	11.17	2.41	2.70	2.97	4.16	5.44
15	18.64	7.57	3.83	7.82	6.98	2.43	3.04	3.37	3.84	7.11
16	25.32	7.58	3.17	8.01	7.05	2.29	3.06	3.28	3.73	22.45
17	11.28	13.96	2.64	5.63	5.26	2.20	3.07	3.61	3.23	10.81
18	22.16	8.05	2.47	8.42	7.40	2.03	2.34	3.33	3.79	10.77
19	121.69	5.81	2.54	6.13	8.15	1.84	2.10	3.25	3.06	11.21
20	15.62	5.71	2.02	6.70	4.76	2.08	2.11	2.44	3.23	5.74
21	17.78	6.16	1.91	7.73	9.65	1.90	2.00	2.65	2.92	7.15
22	22.71	10.19	1.70	5.75	4.84	2.10	1.99	2.59	2.45	5.89
23	19.92	8.39	1.55	6.62	9.67	2.17	2.08	2.55	2.74	4.15
24	19.35	10.02	1.64	6.05	9.07	2.01	2.10	2.47	2.63	9.94
25	82.34	6.12	1.47	7.51	6.37	1.74	2.15	2.39	2.78	9.64
26	22.07	5.59	1.21	6.15	7.19	2.04	2.08	2.21	2.40	5.61
27	0.00	7.58	1.26	5.32	6.32	2.22	2.02	2.20	2.64	18.49
28	35.85	6.62	1.36	6.76	7.61	2.41	2.21	2.14	2.39	12.39
29	81.70	25.53	1.32	8.31	5.94	2.60	2.41	2.25	2.67	62.75
30	0.00	6.21	1.54	12.79	5.07	2.63	2.51	2.22	2.61	10.53
31	0.00	28.74	1.42	12.62	5.36	3.11	3.13	2.17	2.37	9.08
32	17.91	13.23	1.89	29.94	7.44	2.70	3.42	2.55	2.85	12.58
33	0.00	16.38	2.31	202.09	6.05	3.29	3.45	2.98	2.07	5.91
34	57.32	8.57	5.42	0.00	5.74	4.63	4.44	3.00	2.19	16.81
35	0.00	19.48	65.64	0.00	7.48	35.41	4.51	4.08	2.03	34.01
36	0.00	6.78	0.00	0.00	21.60	0.00	6.25	4.16	2.47	20.11
37	19.54	6.00	0.00	0.00	0.00	0.00	8.69	3.78	3.26	9.27
38	7.83	4.66	0.00	0.00	0.00	0.00	0.00	6.47	3.82	0.00
39	1.36	2.48	0.00	0.00	0.00	0.00	0.00	24.25	3.90	20.37
40	0.87	0.11	0.00	0.00	0.00	0.00	87.30	237.85	8.15	39.76
41	3.36	0.28	3.68	0.00	123.07	0.00	7.32	7.68	10.09	0.00
42	0.00	3.83	0.00	0.00	0.00	0.00	63.12	26.89	10.39	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.73	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A1(a).—Continued.

ENHANCED INLET, STATION 5

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-11 AXIAL ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	9.41	5.40	3.68	5.16
2	0.00	0.00	0.00	0.00	11.82	3.57	8.86	11.31	3.88	5.80
3	0.00	0.00	235.95	4.77	9.45	3.11	8.79	6.50	3.47	10.95
4	10.33	0.00	0.00	4.37	13.49	3.01	4.02	4.80	5.22	5.35
5	8.78	0.00	263.91	4.71	9.14	2.25	5.32	3.95	9.50	3.85
6	11.66	0.00	25.40	4.18	9.12	2.57	5.44	5.49	6.46	5.60
7	9.16	0.00	24.91	3.38	9.89	2.27	6.81	5.17	6.40	5.53
8	10.34	73.70	9.53	4.65	8.83	1.95	5.79	4.98	5.38	4.58
9	5.15	166.67	15.44	3.44	9.63	1.72	4.15	5.16	6.02	5.31
10	6.33	74.61	7.58	3.84	7.60	1.64	6.30	4.83	4.58	4.12
11	9.19	34.34	7.55	3.27	5.91	1.53	4.64	5.28	4.44	3.55
12	5.49	29.18	5.51	3.05	5.97	1.53	3.24	3.50	5.69	2.94
13	12.70	39.85	6.79	3.31	7.25	1.64	4.30	4.11	4.40	3.65
14	6.04	37.15	5.67	2.52	6.48	1.48	5.12	6.52	4.12	3.33
15	9.34	26.58	6.49	2.36	4.83	1.42	2.79	4.72	4.44	5.41
16	11.75	36.08	5.94	2.14	7.00	1.61	3.28	4.08	3.95	3.11
17	12.98	12.12	5.32	2.20	5.28	1.31	3.45	3.43	4.36	3.35
18	11.91	20.44	4.47	2.28	4.93	1.33	3.42	3.70	3.95	3.24
19	40.05	19.93	5.20	2.11	5.94	1.20	3.12	3.96	3.61	3.86
20	31.70	71.93	4.65	2.49	4.33	1.01	3.47	3.64	3.95	5.10
21	16.23	29.19	4.13	2.64	3.50	1.03	3.42	3.19	4.08	4.62
22	23.14	14.56	4.05	2.49	4.37	1.19	3.12	2.39	4.21	4.67
23	21.26	17.41	4.52	2.53	3.59	1.15	3.29	3.11	2.91	5.15
24	24.44	20.89	4.35	3.26	4.22	1.26	2.78	3.02	3.25	5.56
25	25.11	42.00	4.36	3.82	3.85	1.11	2.40	2.46	3.06	7.45
26	27.72	17.38	3.72	3.37	3.28	1.34	2.37	2.44	2.72	4.93
27	58.66	38.06	4.08	3.57	3.83	1.50	2.61	2.45	2.63	5.63
28	125.09	191.13	3.49	3.55	3.02	1.85	2.22	2.51	2.12	7.21
29	63.65	14.85	4.56	3.12	3.65	1.59	2.33	2.26	2.27	10.22
30	36.20	36.53	3.69	3.41	3.46	1.77	2.89	2.61	2.11	4.98
31	169.54	37.02	4.63	3.35	3.39	1.60	2.40	2.73	1.80	8.39
32	243.06	36.67	3.23	3.18	3.62	2.16	2.77	2.51	2.54	4.80
33	0.00	70.65	4.20	3.47	3.59	2.12	2.80	2.26	1.82	5.51
34	0.00	36.32	3.79	5.68	4.14	1.81	3.15	2.52	2.45	6.56
35	36.62	40.01	3.82	16.12	3.54	2.47	3.55	2.82	2.44	5.79
36	1.55	0.00	4.72	0.00	3.44	4.37	3.13	3.51	2.57	5.97
37	0.38	163.16	6.35	0.00	3.28	49.26	3.55	4.39	2.91	5.10
38	0.11	0.00	14.88	0.00	9.72	0.00	4.65	3.41	5.06	6.79
39	0.42	0.00	69.67	0.00	43.15	0.00	6.98	5.23	74.53	6.63
40	8.20	15.60	5.64	0.00	0.00	31.38	5.07	3.20	3.36	6.68
41	0.00	35.27	0.00	0.00	0.00	0.00	32.45	24.21	11.22	8.22
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.75	23.71
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	229.06	17.78
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENHANCED INLET, STATION 6

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-11 AXIAL ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	0.00	0.00	0.00	26.62	10.06	4.44	2.99	1.91	3.17	
3	7.39	0.00	18.18	11.56	11.54	7.84	2.69	2.89	3.96	
4	11.33	25.20	11.93	11.15	7.02	6.07	2.18	2.08	3.48	
5	10.02	11.19	9.38	8.13	5.87	7.32	2.50	2.29	4.88	
6	8.51	10.16	5.83	10.18	5.42	4.50	2.42	2.42	4.47	
7	6.12	6.75	4.67	6.44	5.36	5.22	2.22	2.28	3.85	
8	7.56	7.52	3.89	5.05	3.86	4.51	2.48	2.51	5.47	
9	8.52	5.36	3.34	5.21	3.96	4.29	2.40	2.21	4.95	
10	7.52	5.65	3.30	4.72	3.66	3.70	1.90	2.07	4.52	
11	11.44	4.85	3.01	3.81	3.67	4.78	2.15	2.17	4.42	
12	17.18	4.79	2.81	3.43	3.95	4.51	1.99	2.20	4.45	
13	10.31	4.67	2.57	3.64	3.92	3.89	2.06	2.10	5.03	
14	6.80	4.05	2.82	3.36	3.57	4.09	1.90	2.02	3.90	
15	6.28	4.16	2.59	3.29	3.38	3.73	1.86	1.97	3.35	
16	13.24	3.94	2.70	3.06	2.85	3.30	1.81	1.92	4.56	
17	14.20	4.55	2.76	3.16	2.89	3.48	1.86	2.07	4.27	
18	12.17	3.62	2.23	3.04	2.34	3.50	2.18	1.97	4.24	
19	17.03	3.04	1.78	2.45	2.54	3.60	1.82	1.51	4.17	
20	16.85	3.36	1.92	2.66	2.67	2.60	1.77	1.60	4.12	
21	9.05	3.41	2.11	2.55	2.82	3.00	1.57	1.52	3.97	
22	15.10	3.68	1.85	2.06	2.60	3.23	1.82	1.57	3.96	
23	11.28	3.34	1.80	2.84	2.50	2.85	1.72	1.54	3.18	
24	21.07	3.39	1.78	2.34	2.50	2.81	1.50	1.34	3.13	
25	17.56	3.92	2.44	2.29	2.11	2.79	1.46	1.56	3.19	
26	12.50	4.26	2.71	2.61	2.41	2.67	1.41	1.20	3.23	
27	11.47	3.11	1.41	1.69	1.12	1.53	0.92	0.97	2.00	
28	22.82	5.22	2.56	3.23	2.24	2.68	1.44	1.33	2.24	
29	21.19	6.95	3.20	3.20	2.01	3.13	1.26	1.33	2.90	
30	20.44	6.11	2.98	3.43	2.18	2.61	1.33	1.31	3.01	
31	8.68	7.37	3.19	4.68	2.54	2.53	1.20	1.42	3.06	
32	44.58	6.11	3.96	6.02	3.01	3.13	1.15	1.31	3.25	
33	0.00	11.25	5.27	6.75	3.89	3.66	1.33	1.17	2.65	
34	9.61	9.78	6.67	11.03	3.73	3.29	1.39	1.31	2.59	
35	154.63	11.55	9.34	21.21	5.51	3.33	1.27	1.34	2.65	
36	99.53	25.08	8.33	15.63	4.06	3.78	1.53	1.48	2.54	
37	59.74	13.45	11.05	22.36	6.04	3.53	1.39	1.73	2.48	
38	0.00	11.32	11.52	24.70	6.20	4.28	1.44	2.43	2.58	
39	21.19	16.88	10.37	30.59	6.04	3.03	1.31	2.30	3.32	
40	36.91	8.50	12.31	16.02	3.38	2.08	0.91	1.75	3.32	
41	0.00	7.31	10.16	0.39	11.77	5.94	1.58	2.30	4.28	
42	0.00	2.82	0.00	12.92	273.02	0.00	5.82	10.13	8.26	
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

TABLE A1(a).—Concluded.

ENHANCED INLET, STATION 7

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	332.19	0.00	63.67	95.51	9.87	2.15	1.91	2.02	0.00
4	0.00	9.63	0.00	71.56	107.34	7.16	1.53	2.71	2.22	0.00
5	0.00	1.89	0.00	0.00	0.00	6.04	2.08	3.12	2.82	0.30
6	0.00	0.58	0.00	38.29	47.86	6.44	1.74	4.29	1.92	37.77
7	0.00	0.23	0.00	54.90	54.90	10.11	3.18	5.54	2.08	25.39
8	0.00	0.46	0.00	35.39	35.39	12.46	2.59	4.20	3.45	0.30
9	0.00	0.79	135.59	52.06	24.22	5.14	2.99	4.64	3.04	31.69
10	0.00	0.00	138.12	68.87	34.25	5.00	2.89	4.16	3.93	38.42
11	0.00	349.52	47.62	48.15	48.58	5.27	2.66	5.20	3.41	22.76
12	0.00	0.00	133.91	33.64	14.83	5.12	2.58	3.83	4.29	10.21
13	0.00	0.00	47.07	30.35	21.99	3.93	2.98	3.95	3.88	26.87
14	0.00	0.00	95.06	43.01	24.98	3.61	2.66	4.79	4.30	22.81
15	0.00	0.00	26.85	15.60	10.71	3.29	2.88	4.35	3.28	40.47
16	0.00	0.00	88.55	44.89	27.42	3.11	2.98	4.90	4.67	31.66
17	0.00	0.00	24.84	19.12	15.42	3.65	2.67	4.78	4.24	34.60
18	0.00	0.00	54.38	26.42	17.09	3.48	2.52	4.58	4.18	37.07
19	0.00	0.00	31.51	17.31	11.50	3.62	2.36	4.42	4.42	17.72
20	0.00	0.00	26.86	9.50	5.55	1.94	1.53	2.65	2.44	17.90
21	0.00	0.00	64.45	24.43	13.90	2.89	2.78	4.53	4.16	14.56
22	0.00	0.00	37.05	22.37	15.46	3.62	2.53	4.03	4.04	17.58
23	0.00	0.00	37.29	18.95	11.97	3.17	2.47	5.62	4.31	17.57
24	0.00	0.00	43.12	16.62	9.49	2.96	2.29	3.81	5.22	14.55
25	0.00	0.00	35.99	15.92	9.74	2.81	1.94	4.19	4.58	10.20
26	0.00	0.00	51.57	14.29	7.51	2.68	2.27	5.79	4.85	35.34
27	0.00	59.06	26.01	14.97	10.37	3.19	2.48	3.62	4.17	12.12
28	0.00	0.00	21.63	12.09	8.27	3.23	2.13	3.83	4.71	8.81
29	0.00	0.00	35.98	14.74	8.67	2.55	2.26	3.69	4.27	14.54
30	0.00	0.00	24.53	12.31	7.97	2.53	2.51	3.63	4.59	22.28
31	0.00	251.83	23.59	8.86	5.34	2.36	2.25	3.59	3.59	12.09
32	0.00	0.00	24.27	13.13	8.76	2.69	2.01	4.23	4.06	17.61
33	0.00	0.00	16.70	10.36	7.48	2.77	2.15	3.84	3.60	24.97
34	0.00	0.00	18.76	10.16	6.82	2.38	2.02	4.31	4.18	35.16
35	0.00	0.00	21.25	8.02	4.84	2.42	1.79	3.43	3.78	24.29
36	0.00	0.00	19.42	10.97	7.54	2.33	1.76	2.92	3.27	27.64
37	0.00	0.00	22.88	11.79	7.85	2.23	1.82	3.71	3.74	23.31
38	0.00	0.00	21.46	9.10	5.65	2.68	1.43	3.17	3.91	16.43
39	0.00	216.38	23.51	9.65	5.93	2.68	1.58	3.00	3.39	10.43
40	0.00	0.00	13.06	8.16	5.95	3.65	1.89	4.23	3.38	15.01
41	0.00	2.57	8.76	8.31	7.92	3.84	1.73	3.48	2.95	10.18
42	19.20	4.02	17.93	13.04	10.19	6.26	1.55	2.85	2.25	12.11
43	0.00	0.18	8.31	10.81	14.47	7.45	1.93	2.93	2.12	10.78
44	0.00	0.02	0.02	0.05	0.57	8.27	0.83	1.50	1.96	6.95
45	0.13	0.03	0.01	0.01	0.01	4.25	1.05	1.37	1.51	5.92
46	0.02	5.58	0.50	0.38	0.26	0.83	5.46	5.15	2.54	4.43
47	0.02	4.12	8.87	13.09	34.18	12.85	12.23	5.56	5.84	2.19
48	0.12	2.21	7.63	7.63	0.00	60.30	2.72	1.97	2.94	182.84
49	0.00	0.00	0.00	0.00	0.00	0.00	2.42	2.45	1.53	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENHANCED INLET, STATION 8

CP	EA1	EA2	EA3	EA4	EA5	EA6	EA7	EA8	EA9	EA10-% AXIAL ERROR
1	0.00	0.00	0.39	1.27	26.11	4.68	0.41	0.82	7.02	15.13
2	0.00	120.46	0.39	0.69	0.00	22.78	0.74	0.72	16.04	59.31
3	0.00	0.00	0.39	0.62	47.23	27.89	0.95	0.79	41.22	62.86
4	0.00	173.45	0.37	0.98	25.35	16.45	0.77	0.88	15.14	25.07
5	0.00	132.04	0.40	1.15	23.92	22.29	1.70	0.84	15.85	0.00
6	0.00	380.63	0.45	0.88	29.02	25.23	0.46	1.02	17.82	89.10
7	0.00	130.79	0.34	1.35	14.77	29.33	2.00	1.22	11.56	41.05
8	0.00	96.59	0.32	1.95	18.33	15.12	5.18	1.17	6.47	30.85
9	0.00	175.66	0.15	9.65	18.85	10.86	4.45	1.65	8.55	104.22
10	0.00	64.57	11.57	57.82	16.05	14.33	3.52	1.63	6.84	46.00
11	0.00	96.50	23.77	0.00	13.14	11.03	4.08	2.10	7.69	37.37
12	0.00	73.71	19.38	0.00	18.46	10.25	5.37	1.71	7.93	42.56
13	0.00	283.81	27.31	0.00	13.84	11.61	3.49	1.84	9.05	46.85
14	0.00	380.63	17.05	0.00	6.80	10.29	3.89	2.00	18.79	14.51
15	0.00	157.57	19.36	112.49	5.42	9.36	4.29	1.76	6.31	24.79
16	0.00	185.00	18.65	113.84	7.72	7.67	2.58	2.27	6.98	24.72
17	0.00	65.86	16.42	179.37	4.77	8.36	3.46	1.81	9.54	13.65
18	0.00	107.96	12.45	232.58	5.21	4.17	1.49	1.07	5.05	24.22
19	0.00	96.19	28.66	78.62	4.03	7.25	2.93	1.80	6.35	13.33
20	0.00	90.64	32.45	0.00	2.97	6.78	2.88	2.04	8.44	15.75
21	0.00	57.86	33.52	0.00	7.53	7.81	2.88	1.63	6.08	16.13
22	0.00	42.50	23.53	44.76	4.41	5.99	3.39	1.84	18.98	26.39
23	0.00	53.43	21.84	122.17	4.05	8.77	2.77	1.98	8.24	16.20
24	0.00	36.13	20.88	60.77	2.85	7.41	3.13	1.83	7.90	8.94
25	0.00	106.15	24.84	161.91	3.67	9.00	2.84	1.69	8.93	17.06
26	0.00	88.52	18.42	0.00	4.30	6.23	3.33	1.56	8.63	20.56
27	0.00	73.48	27.57	79.99	3.55	6.99	2.91	1.55	15.27	10.45
28	0.00	25.08	16.57	19.18	2.39	7.12	3.39	1.39	11.33	16.31
29	0.00	44.63	17.41	276.22	2.49	5.46	2.79	1.41	16.14	8.61
30	0.00	41.38	26.30	145.59	1.98	5.61	3.70	1.70	15.00	11.33
31	0.00	28.70	21.88	0.00	2.34	8.50	3.32	1.44	11.53	15.26
32	0.00	74.71	25.64	39.33	2.42	6.89	2.49	1.57	8.18	10.35
33	0.00	34.06	25.99	0.00	2.12	6.36	2.83	1.75	9.13	21.69
34	0.00	37.41	24.78	0.00	2.52	6.00	2.66	1.44	13.70	35.67
35	0.00	45.87	20.77	51.04	2.84	8.36	2.42	1.44	11.58	9.10
36	0.00	41.43	20.02	140.16	2.90	5.77	3.27	1.33	9.73	13.53
37	0.00	46.64	20.86	161.18	6.52	5.90	2.45	1.41	15.60	7.49
38	0.00	44.29	21.79	263.73	1.46	5.43	2.65	1.55	8.72	10.93
39	0.00	29.78	15.67	177.29	3.62	4.83	2.24	1.40	5.96	9.96
40	0.00	41.01	14.52	17.57	2.51	4.29	2.34	1.63	9.32	7.93
41	0.00	31.07	0.35	5.92	1.43	4.50	2.33	1.41	11.19	7.64
42	0.02	20.63	0.37	4.95	1.32	4.26	2.20	1.27	6.90	25.91
43	0.01	35.61	0.35	0.00	1.15	4.35	2.17	1.21	7.79	6.21
44	0.25	11.45	21.68	0.00	0.58	2.79	2.03	1.29	7.78	7.58
45	0.00	12.73	10.07	223.42	0.40	2.39	1.35	1.13	6.63	3.50
46	0.00	3.90	16.51	9.33	0.15	1.43	1.10	1.03	7.79	2.47
47	2.24	13.15	0.34	3.27	0.08	0.74	0.71	0.67	6.11	8.50
48	0.15	11.19	0.35	0.31	0.08	0.40	0.43	0.55	4.68	4.04
49	0.05	7.51	0.33	0.15	0.38	0.50	0.45	0.44	3.55	1.43
50	0.13	20.10	0.38	0.93	4.20	1.47	0.25	0.55	4.03	2.22

TABLE A1.—CALCULATED UNCERTAINTIES

(b) Calculated tangential uncertainties (percent)

BASELINE INLET, STATION 1

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.12	0.03	0.04	0.03	0.04	0.03	0.06	0.06	0.04	0.29
2	0.15	0.02	0.05	0.03	0.05	0.03	0.05	0.06	0.04	0.39
3	0.14	0.02	0.05	0.03	0.06	0.03	0.06	0.05	0.04	0.44
4	0.15	0.03	0.04	0.03	0.05	0.03	0.06	0.06	0.02	0.37
5	0.17	0.03	0.04	0.03	0.05	0.03	0.06	0.06	0.04	0.42
6	0.14	0.03	0.04	0.03	0.05	0.03	0.06	0.06	0.04	0.35
7	0.14	0.02	0.04	0.03	0.05	0.03	0.06	0.06	0.05	0.02
8	0.18	0.03	0.04	0.03	0.06	0.03	0.06	0.05	0.04	0.09
9	0.14	0.03	0.05	0.03	0.05	0.03	0.06	0.06	0.04	0.36
10	0.19	0.03	0.04	0.03	0.04	0.03	0.06	0.06	0.04	0.33
11	0.12	0.03	0.05	0.03	0.05	0.03	0.06	0.06	0.02	0.05
12	0.14	0.02	0.04	0.03	0.05	0.03	0.06	0.06	0.02	0.35
13	0.11	0.03	0.05	0.03	0.05	0.03	0.05	0.06	0.03	0.45
14	0.10	0.03	0.05	0.03	0.05	0.03	0.06	0.06	0.02	0.02
15	0.12	0.03	0.04	0.03	0.06	0.03	0.06	0.05	0.04	0.29
16	0.12	0.03	0.05	0.03	0.05	0.03	0.06	0.06	0.04	0.32
17	0.12	0.03	0.05	0.03	0.05	0.03	0.06	0.06	0.02	0.23
18	0.08	0.03	0.05	0.03	0.06	0.04	0.06	0.06	0.03	0.34
19	0.11	0.02	0.05	0.03	0.05	0.04	0.05	0.06	0.03	0.23
20	0.13	0.03	0.04	0.03	0.05	0.03	0.07	0.06	0.04	0.46
21	0.14	0.03	0.05	0.03	0.04	0.03	0.06	0.05	0.04	0.36
22	0.11	0.03	0.05	0.03	0.05	0.03	0.06	0.06	0.03	1.29
23	0.14	0.02	0.04	0.03	0.05	0.03	0.06	0.06	0.03	0.30
24	0.16	0.03	0.04	0.03	0.05	0.03	0.06	0.06	0.04	0.30
25	0.09	0.02	0.05	0.03	0.06	0.03	0.05	0.05	0.03	0.33
26	0.14	0.03	0.04	0.03	0.05	0.03	0.07	0.06	0.03	0.06
27	0.11	0.02	0.04	0.03	0.05	0.03	0.05	0.05	0.02	0.28
28	0.18	0.03	0.05	0.03	0.05	0.03	0.06	0.05	0.03	0.28
29	0.11	0.03	0.04	0.03	0.05	0.03	0.06	0.06	0.02	0.02
30	0.22	0.03	0.04	0.03	0.05	0.03	0.06	0.07	0.04	0.28
31	0.14	0.03	0.05	0.03	0.06	0.03	0.06	0.05	0.04	0.23
32	0.13	0.03	0.05	0.03	0.06	0.03	0.06	0.05	0.04	0.19
33	0.14	0.03	0.04	0.03	0.05	0.03	0.06	0.05	0.04	0.28
34	0.21	0.03	0.05	0.03	0.04	0.03	0.05	0.05	0.03	1.20
35	0.15	0.02	0.03	0.03	0.05	0.03	0.06	0.05	0.02	0.23
36	0.13	0.03	0.03	0.03	0.05	0.03	0.07	0.05	0.05	0.02
37	0.14	0.02	0.04	0.03	0.05	0.03	0.05	0.06	0.04	0.24
38	0.09	0.03	0.04	0.02	0.06	0.03	0.05	0.05	0.04	0.29
39	0.09	0.03	0.05	0.03	0.04	0.03	0.06	0.05	0.02	0.34
40	0.17	0.03	0.06	0.03	0.05	0.03	0.06	0.05	0.03	0.25
41	0.13	0.03	0.04	0.03	0.05	0.03	0.06	0.06	0.03	0.37
42	0.16	0.03	0.04	0.03	0.05	0.03	0.06	0.05	0.01	0.31
43	0.13	0.03	0.05	0.03	0.05	0.03	0.05	0.05	0.02	0.35
44	0.16	0.03	0.05	0.02	0.05	0.03	0.05	0.06	0.01	0.25
45	0.16	0.03	0.05	0.03	0.05	0.03	0.05	0.05	0.02	0.25
46	0.11	0.02	0.04	0.03	0.05	0.03	0.05	0.05	0.03	0.27
47	0.09	0.03	0.05	0.03	0.04	0.03	0.05	0.04	0.04	0.22
48	0.07	0.02	0.04	0.03	0.06	0.03	0.06	0.05	0.04	0.01
49	0.13	0.02	0.05	0.04	0.05	0.03	0.07	0.06	0.04	0.36
50	0.12	0.02	0.03	0.03	0.04	0.03	0.04	0.03	0.04	1.00

BASELINE INLET, STATION 2

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.32	0.75	0.22	2.85	0.11	0.58	0.17	0.49	0.51	1.38
2	0.32	1.16	0.29	3.41	0.06	0.38	0.44	0.08	0.32	1.22
3	0.29	0.93	0.40	2.96	0.19	0.13	0.60	0.46	0.62	2.29
4	0.23	1.14	0.43	6.44	0.28	0.10	0.85	0.77	0.98	8.45
5	0.20	1.08	0.63	5.51	0.31	0.20	0.83	0.75	0.78	5.27
6	0.14	1.01	0.52	7.14	0.32	0.22	0.74	1.24	1.12	15.63
7	0.11	0.82	0.49	5.84	0.36	0.33	1.17	1.10	1.33	4.45
8	0.11	0.52	0.53	6.29	0.33	0.36	0.74	0.91	1.25	4.79
9	0.07	0.49	0.50	5.59	0.32	0.36	0.73	1.07	1.43	7.05
10	0.06	0.42	0.50	6.62	0.34	0.35	0.61	0.83	1.00	7.22
11	0.05	0.30	0.40	5.87	0.26	0.38	0.65	0.78	1.28	8.50
12	0.04	0.30	0.40	5.35	0.29	0.35	0.53	0.59	1.22	82.57
13	0.03	0.18	0.30	9.74	0.24	0.32	0.38	0.52	1.09	14.23
14	0.03	0.15	0.24	5.15	0.21	0.32	0.36	0.48	1.24	22.33
15	0.02	0.08	0.28	4.56	0.18	0.28	0.26	0.45	0.93	9.07
16	0.02	0.08	0.21	4.45	0.20	0.30	0.22	0.31	0.71	11.20
17	0.03	0.12	0.16	2.84	0.19	0.27	0.20	0.28	0.96	12.21
18	0.02	0.16	0.10	3.21	0.17	0.24	0.16	0.22	0.78	5.11
19	0.03	0.16	0.07	3.67	0.13	0.20	0.12	0.12	0.53	4.96
20	0.03	0.17	0.04	2.83	0.11	0.18	0.07	0.11	0.74	3.58
21	0.04	0.25	0.03	1.98	0.10	0.18	0.06	0.05	0.50	4.40
22	0.04	0.29	0.06	2.18	0.08	0.14	0.07	0.02	0.54	3.69
23	0.04	0.27	0.08	2.01	0.06	0.16	0.09	0.04	0.59	6.57
24	0.05	0.27	0.14	2.08	0.04	0.13	0.14	0.11	0.65	3.28
25	0.06	0.36	0.14	1.84	0.03	0.09	0.14	0.12	0.51	2.53
26	0.06	0.36	0.16	2.22	0.01	0.10	0.17	0.17	0.51	10.85
27	0.07	0.48	0.22	3.17	0.02	0.04	0.18	0.17	0.47	2.52
28	0.07	0.43	0.17	3.77	0.04	0.01	0.24	0.23	0.41	6.36
29	0.07	0.50	0.23	2.05	0.05	0.02	0.28	0.18	0.40	3.66
30	0.09	0.52	0.33	1.97	0.06	0.02	0.30	0.31	0.56	12.04
31	0.09	0.49	0.30	1.79	0.07	0.06	0.33	0.28	0.49	4.97
32	0.06	0.36	0.18	2.87	0.06	0.06	0.25	0.23	0.34	3.82
33	0.11	0.47	0.30	4.22	0.10	0.11	0.33	0.35	0.58	5.90
34	0.12	0.58	0.35	5.70	0.12	0.13	0.42	0.37	0.54	2.79
35	0.13	0.56	0.39	5.53	0.13	0.15	0.41	0.33	0.58	2.88
36	0.13	0.60	0.32	8.98	0.12	0.17	0.39	0.40	0.72	4.44
37	0.12	0.65	0.39	2.79	0.15	0.22	0.47	0.43	0.62	5.19
38	0.13	0.55	0.41	2.77	0.15	0.20	0.43	0.47	0.55	5.10
39	0.15	0.67	0.48	1.99	0.19	0.29	0.50	0.50	0.60	9.73
40	0.15	0.73	0.46	2.39	0.16	0.24	0.48	0.49	0.60	2.37
41	0.14	0.72	0.45	5.24	0.21	0.32	0.55	0.44	0.65	4.11
42	0.17	0.72	0.50	7.86	0.22	0.34	0.57	0.60	0.74	-4.32
43	0.17	0.86	0.50	3.88	0.21	0.33	0.60	0.66	0.55	4.22
44	0.18	0.83	0.53	4.10	0.20	0.36	0.64	0.59	0.67	11.70
45	0.19	0.69	0.45	6.73	0.24	0.38	0.70	0.72	0.64	4.21
46	0.15	0.73	0.52	5.63	0.28	0.48	0.80	0.76	0.85	5.43
47	0.12	0.64	0.50	5.59	0.28	0.43	0.75	0.67	0.92	2.48
48	0.03	0.44	0.38	3.94	0.27	0.54	0.85	0.91	0.81	7.50
49	0.19	0.15	0.25	4.71	0.24	0.46	0.95	0.79	0.82	2.87
50	0.29	0.42	0.04	2.14	0.26	0.56	0.89	1.02	0.51	2.31

TABLE A1(b).—Continued.

BASELINE INLET, STATION 3

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1		0.00	0.92	2.91	2.50	0.00	4.58	0.00	0.00	0.00
2		0.00	0.57	42.60	0.00	0.00	0.03	0.00	3.17	0.20
3		0.00	282.43	21.73	102.68	15.21	1.40	4.24	0.94	0.31
4		0.00	0.00	231.40	179.06	2.83	89.55	203.67	4.90	1.21
5		0.00	0.00	0.00	0.00	0.00	0.00	113.54	73.41	0.51
6		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.51
7		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8		1.67	0.00	0.00	4.54	2.54	2.71	0.00	0.00	0.00
9		0.00	2.67	3.55	9.69	1.15	1.53	3.10	3.10	0.00
10		0.87	1.87	2.54	4.69	1.70	1.59	1.47	2.51	0.00
11		1.26	1.30	1.90	6.49	0.79	0.86	1.26	2.64	1.91
12		0.83	1.68	2.16	5.24	0.49	0.96	1.19	1.77	3.13
13		0.45	1.32	3.15	2.77	0.39	1.02	1.30	1.67	3.47
14		0.66	1.31	2.05	5.81	0.36	0.79	1.05	1.37	4.84
15		0.43	1.12	1.45	3.57	0.37	0.85	1.00	1.20	2.40
16		0.19	0.83	0.96	4.38	0.33	0.65	1.05	1.56	41.74
17		0.16	0.86	0.88	2.45	0.29	0.55	1.04	1.15	4.96
18		0.07	0.63	0.83	2.67	0.32	0.43	0.78	1.53	0.47
19		0.09	0.51	0.82	3.68	0.30	0.42	0.69	1.13	0.08
20		0.20	0.49	0.73	1.72	0.34	0.28	0.59	0.78	0.05
21		0.20	0.66	0.52	2.12	0.36	0.23	0.70	1.12	0.05
22		0.33	0.73	0.40	2.37	0.34	0.09	0.59	0.76	0.06
23		0.31	0.54	0.39	1.60	0.29	0.16	0.65	0.82	0.07
24		0.33	0.67	0.46	1.91	0.31	0.07	0.46	0.76	0.08
25		0.44	0.49	0.47	3.54	0.31	0.03	0.74	0.64	0.09
26		0.61	0.82	0.48	1.32	0.28	0.13	0.61	1.09	0.19
27		0.49	0.74	0.41	1.95	0.38	0.17	0.51	0.77	0.56
28		0.41	0.68	0.62	1.38	0.18	0.16	0.25	0.37	0.63
29		0.79	0.77	0.48	2.02	0.39	0.25	0.46	0.77	2.61
30		0.88	0.89	0.77	1.70	0.38	0.28	0.61	0.76	17.68
31		0.78	1.08	0.63	1.81	0.37	0.36	0.54	0.69	39.78
32		0.89	1.01	0.76	2.29	0.42	0.36	0.44	0.60	6.01
33		0.87	1.33	0.99	2.59	0.43	0.45	0.66	0.54	0.00
34		0.81	0.92	0.74	1.86	0.47	0.42	0.56	0.63	39.19
35		1.24	0.87	1.11	1.62	0.51	0.50	0.66	0.82	7.35
36		1.20	0.92	1.02	2.24	0.51	0.55	0.56	0.76	5.09
37		2.33	1.73	1.42	2.85	0.51	0.75	0.58	0.65	57.22
38		1.42	1.74	1.16	1.91	0.47	0.52	0.68	0.75	77.88
39		1.85	1.56	1.59	3.41	0.51	0.83	0.77	0.74	13.60
40		2.27	1.91	1.56	2.33	0.52	0.90	0.81	0.99	18.09
41		2.29	2.01	2.09	3.69	0.60	0.92	0.92	0.76	22.02
42		2.99	2.33	2.49	2.75	0.61	1.09	0.82	0.97	3.83
43		6.22	2.50	2.58	4.24	0.77	0.95	0.89	0.89	7.62
44		4.13	2.74	3.27	5.16	0.79	1.08	0.97	1.06	50.98
45		7.54	4.04	4.67	7.27	1.31	1.26	1.15	1.18	9.93
46		18.64	10.55	6.25	7.94	1.34	1.75	1.41	1.19	6.20
47		0.00	12.55	9.60	20.71	2.04	2.27	1.90	1.51	19.16
48		0.00	91.13	0.00	0.00	5.61	3.35	3.35	2.32	0.00
49		0.00	0.00	0.00	0.00	0.00	7.87	7.22	14.40	0.00
50		0.00	1.76	0.00	0.00	0.00	0.00	87.83	0.00	0.00

BASELINE INLET, STATION 4

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.00	0.00	0.00	0.00	0.00	5.83	1.82	3.42	8.12	20.53
2	0.00	0.00	0.00	7.18	1.09	2.18	0.74	1.10	6.70	13.11
3	0.00	0.00	5.12	7.80	0.57	1.01	0.89	0.78	5.35	6.87
4	46.78	0.70	1.35	1.95	0.40	0.77	1.01	0.60	1.77	8.36
5	0.00	0.64	0.94	1.32	0.25	0.58	0.77	0.69	1.79	3.63
6	26.83	0.34	0.30	0.50	0.14	0.32	0.37	0.34	1.35	4.80
7	0.00	0.74	0.52	0.69	0.20	0.32	0.74	0.40	0.92	4.81
8	50.60	0.82	0.55	0.72	0.18	0.27	0.60	0.35	1.20	5.04
9	36.36	0.69	0.54	0.59	0.18	0.24	0.65	0.66	0.91	2.71
10	42.78	0.85	0.50	0.61	0.16	0.29	0.94	0.41	1.14	3.87
11	175.92	0.69	0.53	0.48	0.19	0.25	0.64	0.39	0.73	2.92
12	88.20	0.70	0.56	0.56	0.18	0.29	0.82	0.56	0.71	4.02
13	17.26	0.78	0.54	0.62	0.19	0.27	0.67	0.58	0.79	3.71
14	14.58	0.91	0.62	0.50	0.17	0.32	0.64	0.64	0.81	2.29
15	18.13	0.88	0.61	0.67	0.17	0.35	0.74	0.55	0.65	2.99
16	13.17	0.85	0.57	0.58	0.16	0.37	0.76	0.70	0.73	2.70
17	12.60	0.87	0.71	0.70	0.19	0.33	0.84	0.70	0.68	3.21
18	20.45	0.85	0.73	0.70	0.22	0.35	1.05	0.78	0.60	3.04
19	16.01	1.17	0.54	0.55	0.23	0.37	1.02	0.66	0.54	4.02
20	12.60	1.30	0.61	0.74	0.25	0.39	0.98	0.66	0.73	4.51
21	19.89	1.25	0.71	0.69	0.24	0.54	0.95	0.73	0.77	4.79
22	7.75	1.25	0.71	0.68	0.25	0.48	1.03	0.91	0.82	3.61
23	15.20	1.44	0.78	0.89	0.23	0.52	1.12	0.91	0.80	3.96
24	37.41	1.62	1.03	0.98	0.26	0.49	1.14	0.86	0.81	2.73
25	28.15	1.97	0.89	0.90	0.40	0.49	1.06	0.84	0.90	3.14
26	108.75	2.32	1.16	1.14	2.24	0.50	1.23	0.99	1.11	3.57
27	0.00	2.43	1.55	1.29	18.49	0.48	1.11	1.06	0.79	3.09
28	0.00	2.32	1.33	1.13	0.00	0.52	1.03	0.94	0.78	2.20
29	0.00	2.10	1.45	1.33	0.00	0.58	1.06	1.12	0.82	3.39
30	0.00	2.13	1.67	1.44	0.00	0.68	1.22	1.22	0.78	3.95
31	0.00	2.11	1.76	1.23	0.00	0.72	1.17	0.99	0.87	2.93
32	0.00	2.43	1.76	1.69	0.00	0.78	1.24	1.52	1.09	3.59
33	0.00	4.35	4.31	2.68	0.00	0.90	1.69	1.56	0.82	2.58
34	0.00	12.14	29.52	9.64	0.00	0.90	1.86	1.51	1.04	2.24
35	0.00	0.00	0.00	30.60	0.00	1.86	2.06	1.93	1.20	2.38
36	0.00	0.00	0.00	0.00	0.00	4.18	6.14	2.18	1.65	2.67
37	0.00	0.00	0.00	0.00	0.00	11.48	137.76	7.98	1.79	5.33
38	0.00	0.00	0.00	0.00	0.00	21.93	0.00	111.85	6.64	7.14
39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.49	10.15
40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	0.00	0.00	0.00	0.00	11.14	0.00	0.00	0.00	0.00	0.00
43	0.00	0.00	0.00	0.00	4.26	0.00	11.09	2.15	13.83	3.68
44	0.00	0.00	0.00	0.00	8.48	1.66	0.49	1.16	28.85	4.13
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.80	16.63
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A1(b).—Continued.

BASELINE INLET, STATION 5

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.15	21.54	0.00
2	0.00	0.00	0.00	0.00	12.90	12.36	4.20	2.52	10.79	213.81
3	0.00	0.00	4.75	4.75	9.97	6.04	2.71	3.80	17.90	0.00
4	2.35	1.57	2.31	4.09	4.43	7.94	2.08	2.13	13.86	0.00
5	1.84	1.13	1.68	2.99	3.57	5.13	1.69	1.91	10.47	41.34
6	2.20	1.12	1.64	2.79	2.81	3.45	2.92	1.89	9.28	73.43
7	2.36	1.14	1.59	2.51	2.39	2.85	1.62	1.69	11.48	57.54
8	1.93	1.33	1.50	1.71	2.24	1.65	2.15	1.64	18.51	61.80
9	2.06	1.00	1.37	2.02	1.46	2.12	1.70	1.26	7.55	22.35
10	2.44	1.21	1.39	1.62	1.55	1.83	1.44	1.46	11.27	88.11
11	2.70	1.08	1.34	1.45	1.34	1.39	1.59	1.41	8.29	36.82
12	2.09	1.03	1.30	1.41	1.29	1.91	1.38	1.64	6.74	34.84
13	2.62	1.08	1.27	1.53	1.30	1.64	1.40	1.47	8.29	20.55
14	2.65	1.03	1.11	1.19	1.20	1.47	1.27	1.53	5.50	24.07
15	1.83	1.24	1.38	1.55	1.11	1.14	1.31	1.40	9.50	45.78
16	1.59	1.03	1.07	1.12	1.32	1.25	1.32	1.83	4.41	15.03
17	1.42	1.32	1.26	1.20	1.27	1.36	1.03	1.46	8.98	11.41
18	1.30	1.23	1.07	0.94	0.98	1.40	1.32	1.30	5.59	51.61
19	1.21	1.12	1.16	1.20	1.27	1.37	1.59	1.42	7.13	25.87
20	1.19	1.41	1.34	1.28	1.06	1.48	1.29	1.22	5.26	16.50
21	1.08	1.44	1.38	1.33	1.26	1.20	1.55	1.16	7.37	26.48
22	1.08	1.41	1.24	1.11	1.16	1.30	1.21	1.14	7.09	19.29
23	1.38	1.43	1.28	1.15	1.36	1.35	1.16	1.03	5.94	18.97
24	1.04	1.53	1.33	1.17	1.32	1.24	1.35	1.16	4.59	22.92
25	1.46	1.85	1.58	1.36	1.34	1.28	1.04	1.29	4.89	25.55
26	1.20	2.04	1.67	1.40	1.85	1.39	1.12	1.10	4.89	13.46
27	1.59	2.63	1.90	1.46	1.62	1.63	1.24	1.07	5.15	54.51
28	1.57	2.60	2.05	1.67	1.78	1.60	1.31	1.11	4.04	14.72
29	1.86	3.43	2.19	1.59	1.77	1.78	1.41	1.11	3.55	25.45
30	1.60	3.35	2.55	2.02	2.24	1.80	2.31	1.12	4.09	32.69
31	1.98	3.62	2.43	1.80	2.36	1.98	1.69	1.13	4.55	10.76
32	2.26	4.77	2.68	1.83	2.35	2.03	2.16	2.01	2.83	11.66
33	2.00	3.90	2.95	2.33	2.01	2.43	2.49	1.35	4.73	11.57
34	2.80	10.79	4.27	2.57	2.48	2.74	3.19	2.01	7.63	9.73
35	7.79	0.00	2.43	2.89	3.57	3.27	3.35	2.37	7.78	10.40
36	23.61	113.80	20.51	8.85	9.16	3.45	4.90	3.34	5.73	10.88
37	90.35	0.00	9.95	10.95	6.46	3.42	10.97	5.31	10.71	6.41
38	0.00	75.67	46.05	28.28	16.40	10.15	0.00	27.64	109.45	8.01
39	0.00	126.99	84.66	0.00	0.00	19.12	76.25	0.00	0.00	8.71
40	0.00	161.01	161.01	0.00	0.00	135.47	0.00	0.00	0.00	148.79
41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.63	0.00
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	122.24	0.00	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	8.64	9.30	2.78	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

BASELINE INLET, STATION 6

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	3.67	4.53	5.30	2.35	2.21	19.25	9.27
3	4.29	2.15	1.08	2.62	5.98	3.94	1.65	1.64	0.00	7.86
4	4.94	2.19	0.97	3.07	4.21	3.65	1.43	1.55	17.84	6.78
5	5.06	1.64	0.89	2.30	3.31	3.54	1.47	1.53	14.43	15.65
6	3.50	1.36	0.96	2.01	3.11	3.48	1.32	1.40	20.62	6.95
7	3.95	1.41	1.00	2.02	2.96	2.55	1.23	1.29	8.12	4.93
8	3.75	1.23	0.93	1.91	2.93	4.11	1.24	1.47	8.58	19.50
9	3.17	1.27	0.92	1.94	2.53	2.36	1.10	1.23	12.21	5.17
10	2.51	1.21	0.88	1.66	1.95	2.03	1.25	1.39	10.21	5.78
11	2.27	1.24	0.86	1.69	2.09	2.01	1.13	1.29	9.24	5.66
12	2.24	1.26	0.91	1.84	2.06	1.97	1.02	1.24	5.43	11.25
13	2.01	1.23	0.89	1.84	1.78	2.14	1.07	1.14	20.77	9.41
14	1.84	1.32	0.86	2.30	1.81	2.08	1.36	0.97	5.05	10.50
15	1.81	1.51	0.74	1.64	1.71	1.96	0.99	1.17	8.82	3.53
16	1.77	1.41	0.82	1.84	1.81	1.86	0.95	1.17	4.34	8.09
17	1.68	1.55	0.91	1.78	1.82	2.14	1.23	1.01	5.63	8.13
18	1.50	1.47	0.80	1.62	1.76	1.67	1.07	0.96	5.91	5.59
19	1.28	1.56	0.90	1.68	2.13	1.54	1.22	0.02	16.56	10.61
20	1.51	1.38	0.81	1.52	1.81	2.01	1.01	1.07	4.38	4.16
21	1.40	1.79	0.76	1.84	1.48	1.64	1.00	1.14	5.93	7.04
22	1.76	1.67	0.93	1.45	1.69	1.82	0.89	0.95	23.86	7.02
23	1.65	1.72	0.96	1.59	1.69	1.51	0.90	0.86	3.38	9.61
24	1.85	1.94	0.93	1.83	1.82	2.09	0.85	0.89	5.22	7.62
25	1.57	2.26	1.20	1.93	1.59	1.84	0.85	0.81	9.30	6.56
26	1.62	3.34	1.10	1.99	1.84	1.84	0.96	0.78	3.94	3.17
27	1.32	1.56	0.87	1.48	1.25	1.26	0.61	0.56	3.80	2.97
28	2.94	2.79	1.94	2.77	2.06	2.42	0.97	0.92	15.51	3.93
29	3.54	3.68	1.76	4.00	1.97	2.63	0.95	0.83	3.67	6.07
30	4.31	4.36	2.27	3.29	2.92	3.19	1.06	0.86	7.03	2.85
31	5.23	7.37	3.22	4.47	2.61	3.87	1.19	0.84	9.62	3.38
32	6.93	5.17	3.98	4.91	3.08	3.70	1.25	0.76	3.72	2.89
33	4.91	7.26	4.67	6.26	4.29	8.94	1.34	1.04	3.81	5.54
34	16.32	7.80	4.97	10.04	4.20	8.02	1.79	1.09	4.22	3.08
35	24.86	15.29	6.47	12.29	6.04	10.43	1.48	1.50	4.23	1.56
36	3.01	21.82	13.06	18.18	5.27	16.40	1.44	1.65	1.26	1.41
37	10.97	6.06	9.95	13.98	6.81	52.65	1.55	1.75	1.63	0.96
38	4.64	0.00	16.40	14.47	15.16	42.51	2.31	3.19	1.30	1.22
39	102.18	0.00	39.31	35.92	16.88	266.86	8.68	7.14	4.16	1.32
40	0.00	0.00	0.00	0.00	45.51	0.00	37.37	13.14	8.13	2.24
41	0.00	0.00	0.00	109.81	0.00	43.48	42.92	0.00	9.49	3.68
42	0.00	21.29	104.04	96.33	222.07	247.10	14.80	5.05	1.65	1.94
43	0.00	17.68	71.03	237.21	259.05	7.14	2.33	2.58	0.97	1.96
44	0.00	12.40	9.18	62.46	0.00	8.53	31.17	3.72	1.18	1.82
45	0.00	0.00	0.00	0.00	0.00	54.37	7.06	8.51	3.12	1.50
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A1(b).—Continued.

BASELINE INLET, STATION 7

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	3.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	4.14	2.04	3.96	9.79	3.44	4.83	6.45	13.12	5.73	9.00
4	3.69	1.78	3.22	7.21	3.75	5.06	3.05	13.16	4.49	7.70
5	2.57	1.32	2.54	6.35	2.85	3.83	2.91	10.96	4.46	7.74
6	2.56	1.01	2.40	5.86	2.68	3.35	3.33	10.11	4.77	5.94
7	2.07	0.81	2.13	5.99	2.44	2.32	2.57	5.24	3.08	5.98
8	1.91	0.81	2.10	5.31	1.92	2.26	2.40	4.55	3.49	6.29
9	1.52	0.87	2.17	4.84	1.50	2.10	2.35	4.08	2.19	6.03
10	1.50	0.76	2.34	4.16	1.72	1.85	2.08	3.45	2.22	3.95
11	1.34	0.79	2.16	4.13	1.74	1.70	1.82	4.58	2.23	3.68
12	1.17	0.77	2.08	4.49	1.47	2.00	1.97	3.21	1.85	7.59
13	1.24	0.76	2.05	5.23	1.40	1.49	1.49	2.83	1.75	4.41
14	1.09	0.75	1.97	4.92	1.26	1.33	1.78	2.45	1.58	4.42
15	1.14	0.66	2.07	4.53	1.30	1.32	1.37	2.74	1.35	4.53
16	1.05	0.79	1.84	3.71	1.32	1.56	1.41	4.60	1.46	4.35
17	1.15	0.69	2.15	4.24	1.18	1.28	1.29	2.83	1.76	6.12
18	1.16	0.75	2.01	3.81	1.30	1.17	1.27	2.81	1.56	2.77
19	0.94	0.72	2.08	4.22	1.20	1.31	1.27	3.15	1.39	3.64
20	0.59	0.47	1.26	2.90	0.79	0.75	0.87	1.67	0.78	2.07
21	0.88	0.74	1.84	5.02	1.09	1.18	1.13	2.23	1.42	3.54
22	0.95	0.80	2.01	3.37	1.06	1.08	1.44	2.71	1.29	5.26
23	0.86	0.79	1.65	3.93	1.14	1.17	1.12	2.31	1.33	4.37
24	0.95	0.81	2.06	4.48	0.98	1.06	1.39	2.48	1.21	4.54
25	0.90	0.73	2.15	4.38	1.00	1.08	1.10	2.13	1.28	5.21
26	0.97	0.77	1.93	4.47	1.11	1.15	0.97	2.23	1.35	4.38
27	0.87	0.68	1.94	4.01	1.00	1.12	1.12	2.19	1.08	5.09
28	1.10	0.69	1.92	3.48	0.93	0.93	0.98	2.33	1.18	5.09
29	1.06	0.83	1.75	3.61	1.11	0.95	1.09	2.08	1.29	3.06
30	1.21	0.81	2.06	3.94	1.00	1.04	1.05	2.24	1.24	3.62
31	1.12	0.90	1.87	3.87	0.92	1.03	0.83	1.74	1.07	4.18
32	1.40	1.02	2.02	3.77	1.02	1.07	1.00	1.88	1.16	2.57
33	1.45	1.14	2.10	3.72	1.03	0.91	1.01	2.27	1.18	3.87
34	2.00	1.30	2.62	5.84	0.92	0.94	1.07	2.04	1.20	2.99
35	2.23	1.56	2.21	5.63	1.07	1.07	0.96	2.38	1.07	3.06
36	2.40	1.75	3.07	5.20	1.28	1.35	0.93	1.94	1.03	2.47
37	2.88	2.04	2.72	5.97	1.41	1.15	0.96	1.92	1.04	2.58
38	2.65	2.65	3.11	5.69	1.92	1.53	1.19	1.71	1.21	2.30
39	4.31	3.22	4.29	10.21	1.99	1.71	1.06	1.95	0.73	2.21
40	7.03	3.45	3.14	5.57	2.44	2.21	1.46	2.47	0.71	2.03
41	7.98	5.17	4.45	5.85	3.61	2.59	1.89	2.58	0.70	1.47
42	2.13	11.02	9.35	8.72	4.96	3.60	2.28	4.03	0.79	1.62
43	11.59	18.90	14.48	16.13	8.54	4.84	4.70	7.03	1.88	1.21
44	2.71	24.61	30.30	75.32	17.52	17.22	9.53	15.02	2.58	2.54
45	0.87	33.85	0.00	0.00	115.07	17.66	19.80	23.26	5.88	6.51
46	3.01	48.24	154.31	0.00	18.17	21.84	23.97	38.85	9.39	9.24
47	28.37	23.50	0.00	49.37	10.35	39.34	17.21	34.22	8.92	11.11
48	6.74	15.57	20.75	53.38	17.50	15.13	23.33	22.51	8.25	10.72
49	0.00	0.00	0.00	0.00	7.00	10.43	14.76	35.40	8.39	11.48
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

BASELINE INLET, STATION 8

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	2.42	19.79	19.57	14.80	14.08	23.54	14.70	10.15	12.79	4.53
2	5.70	25.46	21.22	19.35	20.22	16.48	9.65	8.41	8.81	4.46
3	17.12	45.85	12.42	9.54	19.23	9.21	6.91	6.44	5.86	3.67
4	0.00	0.00	15.00	7.14	15.18	7.55	10.31	6.98	5.83	4.45
5	0.00	10.64	8.35	7.20	11.94	9.98	6.50	5.50	4.25	3.94
6	25.28	80.04	4.83	4.34	14.11	7.21	4.30	5.22	4.65	3.25
7	41.60	18.58	3.92	3.81	4.75	4.71	3.90	3.04	3.49	2.94
8	0.00	12.22	3.13	3.13	6.33	4.05	4.20	2.95	3.55	2.71
9	0.00	37.08	2.72	2.46	4.09	4.89	3.21	2.86	3.96	2.67
10	0.00	23.14	1.96	2.97	4.23	3.55	2.77	2.24	3.33	2.65
11	0.00	5.92	2.23	2.01	4.18	2.88	3.01	2.27	2.64	3.30
12	0.00	3.32	1.85	2.24	3.42	2.02	2.37	2.27	1.73	2.33
13	0.00	5.41	1.67	1.73	2.39	2.08	1.84	2.02	2.05	2.82
14	0.00	7.23	1.66	1.45	2.10	1.99	1.77	1.97	2.04	2.52
15	0.00	5.29	1.85	1.51	1.98	1.76	1.79	1.64	2.31	2.83
16	0.00	10.90	1.61	1.35	1.79	1.87	1.63	1.56	2.17	2.07
17	0.00	4.15	1.65	1.79	2.37	1.71	1.34	1.49	1.57	3.16
18	0.00	2.45	1.04	0.96	0.99	1.04	1.09	0.96	1.04	1.54
19	0.00	4.79	1.67	1.86	1.57	1.47	1.65	1.45	1.93	2.30
20	0.00	2.94	2.05	1.77	1.78	1.44	1.42	1.69	1.47	2.95
21	0.00	3.99	1.93	1.64	1.52	1.68	1.47	1.23	1.76	2.10
22	0.00	3.64	1.61	1.47	1.55	1.49	1.33	1.47	1.51	3.13
23	0.00	3.03	1.77	1.51	1.41	1.10	1.24	1.46	1.83	2.42
24	0.00	4.38	1.64	1.65	1.61	1.41	1.43	1.65	1.41	2.01
25	0.00	4.34	1.54	1.39	1.82	1.32	1.32	1.21	1.37	2.83
26	0.00	3.43	1.72	1.32	1.50	1.31	1.17	1.14	1.35	1.97
27	0.00	3.13	1.69	1.66	1.73	1.24	1.15	1.18	1.29	1.93
28	0.00	4.60	1.57	1.41	1.40	1.26	1.49	1.21	1.25	2.13
29	0.00	4.46	1.58	1.50	1.40	1.16	1.08	1.22	1.42	1.93
30	0.00	4.15	1.66	1.32	1.37	1.32	1.32	1.46	1.34	2.66
31	0.00	4.30	1.62	1.23	1.60	1.26	1.15	1.41	1.42	1.64
32	0.00	6.88	1.56	1.32	1.46	1.24	1.11	1.05	1.64	1.94
33	0.00	4.65	1.57	1.37	1.30	1.08	1.11	1.10	1.46	1.92
34	0.00	5.20	1.45	1.22	1.42	1.23	1.25	0.95	1.60	1.71
35	118.58	4.93	1.52	1.48	1.30	1.13	1.06	1.19	1.24	2.19
36	19.04	2.86	1.56	1.24	1.52	1.03	1.07	1.04	1.48	1.59
37	6.44	3.59	1.47	1.29	1.39	1.06	1.04	0.99	1.21	1.42
38	3.53	4.63	1.62	1.19	1.26	1.01	1.24	1.18	1.46	1.45
39	3.99	3.82	1.47	1.22	1.20	1.07	0.95	1.22	1.16	1.39
40	2.18	4.37	1.42	1.23	1.10	0.95	0.94	0.97	1.23	1.25
41	0.50	3.06	1.13	1.18	0.90	0.83	1.21	1.00	0.94	1.19
42	1.65	2.55	0.87	0.97	1.06	0.92	0.88	0.85	0.90	0.93
43	1.54	1.99	0.62	0.70	0.75	0.66	0.64	0.79	0.74	0.82
44	1.04	1.62	0.58	0.75	0.54	0.58	0.59	0.60	0.52	0.72
45	0.25	1.96	0.96	0.80	0.54	0.52	0.55	0.52	0.47	0.57
46	0.18	0.92	2.70	1.52	0.89	0.73	0.60	0.58	0.46	0.52
47	0.19	1.41	6.86	4.72	2.26	1.28	1.29	0.92	0.72	0.61
48	0.51	4.66	34.27	13.48	10.43	3.66	3.87	3.07	1.47	1.13
49	1.11	37.74	126.28	26.77	14.38	9.52	11.18	4.78	3.75	1.97
50	4.81	235.42	124.62	17.47	37.51	32.66	23.46	10.09	4.52	3.21

TABLE A1(b).—Continued.

ENHANCED INLET, STATION 1

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.22	0.24	0.18	0.14	0.19	0.14	0.15	0.15	0.15	0.65
2	0.18	0.18	0.25	0.15	0.19	0.18	0.14	0.13	0.14	0.62
3	0.24	0.17	0.17	0.20	0.20	0.18	0.17	0.17	0.23	0.21
4	0.32	0.23	0.18	0.17	0.13	0.20	0.22	0.10	0.20	0.34
5	0.38	0.21	0.16	0.17	0.24	0.20	0.18	0.13	0.19	0.49
6	0.14	0.19	0.16	0.18	0.18	0.17	0.17	0.15	0.18	0.33
7	0.17	0.19	0.19	0.19	0.17	0.20	0.15	0.12	0.22	0.44
8	0.15	0.20	0.19	0.19	0.19	0.19	0.18	0.13	0.20	0.47
9	0.21	0.15	0.24	0.16	0.17	0.23	0.15	0.17	0.16	0.45
10	0.18	0.22	0.21	0.22	0.21	0.23	0.15	0.14	0.16	0.40
11	0.33	0.17	0.20	0.19	0.22	0.17	0.20	0.13	0.23	0.26
12	0.12	0.20	0.19	0.24	0.21	0.20	0.20	0.15	0.16	0.31
13	0.28	0.17	0.17	0.17	0.21	0.21	0.21	0.15	0.19	0.37
14	0.12	0.21	0.26	0.18	0.22	0.22	0.18	0.15	0.16	0.46
15	0.20	0.19	0.24	0.21	0.23	0.19	0.18	0.13	0.17	0.73
16	0.12	0.22	0.18	0.18	0.18	0.18	0.19	0.15	0.17	0.67
17	0.21	0.19	0.27	0.22	0.20	0.27	0.20	0.17	0.22	0.61
18	0.17	0.19	0.20	0.22	0.23	0.20	0.21	0.15	0.18	0.68
19	0.16	0.20	0.22	0.20	0.22	0.22	0.17	0.15	0.19	0.29
20	0.37	0.25	0.22	0.18	0.22	0.24	0.23	0.17	0.20	0.41
21	0.20	0.20	0.21	0.23	0.26	0.21	0.16	0.14	0.19	0.43
22	0.21	0.17	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.36
23	0.14	0.19	0.23	0.16	0.21	0.21	0.22	0.14	0.18	0.36
24	0.24	0.20	0.19	0.14	0.22	0.20	0.15	0.16	0.17	0.37
25	0.22	0.16	0.21	0.26	0.21	0.21	0.15	0.12	0.17	0.41
26	0.25	0.20	0.24	0.11	0.19	0.22	0.23	0.16	0.15	0.29
27	0.31	0.18	0.19	0.15	0.22	0.17	0.19	0.14	0.19	0.65
28	0.14	0.19	0.22	0.18	0.19	0.19	0.19	0.11	0.14	0.38
29	0.24	0.22	0.15	0.17	0.21	0.19	0.21	0.13	0.15	0.57
30	0.28	0.17	0.16	0.15	0.19	0.18	0.16	0.15	0.17	0.31
31	0.21	0.16	0.16	0.18	0.20	0.17	0.16	0.13	0.14	0.29
32	0.11	0.17	0.17	0.21	0.20	0.17	0.18	0.14	0.19	0.46
33	0.17	0.19	0.17	0.19	0.23	0.18	0.17	0.12	0.18	0.55
34	0.16	0.18	0.14	0.18	0.17	0.24	0.15	0.12	0.14	0.40
35	0.23	0.15	0.16	0.15	0.22	0.19	0.16	0.09	0.13	0.38
36	0.23	0.19	0.20	0.14	0.25	0.19	0.20	0.13	0.12	0.35
37	0.19	0.16	0.20	0.15	0.19	0.19	0.11	0.16	0.14	0.28
38	0.18	0.18	0.13	0.12	0.26	0.18	0.14	0.11	0.16	0.46
39	0.17	0.15	0.14	0.18	0.17	0.17	0.14	0.13	0.16	0.25
40	0.23	0.24	0.12	0.17	0.18	0.16	0.16	0.11	0.14	0.21
41	0.13	0.20	0.17	0.21	0.23	0.19	0.15	0.12	0.15	0.11
42	0.20	0.25	0.16	0.12	0.20	0.17	0.12	0.08	0.10	0.55
43	0.13	0.20	0.11	0.14	0.22	0.19	0.16	0.12	0.15	0.21
44	0.18	0.18	0.18	0.15	0.18	0.14	0.10	0.12	0.17	0.25
45	0.15	0.19	0.12	0.14	0.16	0.15	0.16	0.09	0.14	0.61
46	0.17	0.19	0.19	0.19	0.12	0.15	0.16	0.10	0.10	0.23
47	0.18	0.16	0.14	0.16	0.15	0.19	0.15	0.11	0.13	0.26
48	0.15	0.16	0.12	0.16	0.19	0.13	0.12	0.13	0.16	0.45
49	0.20	0.15	0.21	0.13	0.13	0.19	0.12	0.11	0.16	0.40
50	0.20	0.12	0.15	0.14	0.13	0.15	0.07	0.09	0.09	0.64

ENHANCED INLET, STATION 2

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.24	0.27	0.53	1.09	1.34	1.37	1.41	1.78	1.38	4.20
2	0.44	0.31	0.26	1.02	1.18	1.33	1.49	1.80	1.90	4.94
3	0.78	0.43	0.05	0.19	0.27	0.44	0.69	1.47	1.60	4.97
4	0.53	0.58	0.15	0.57	0.67	0.39	0.11	0.26	1.77	9.41
5	0.60	0.70	0.26	0.59	0.80	0.72	0.63	0.64	0.05	5.50
6	0.74	0.78	0.44	0.84	1.24	1.11	0.99	0.85	1.42	2.68
7	0.48	0.73	0.46	0.80	1.23	1.32	1.42	1.15	1.06	3.74
8	0.48	0.70	0.45	1.05	0.92	1.06	1.25	1.12	1.94	6.12
9	0.49	0.72	0.63	0.91	1.17	1.15	1.12	1.24	1.28	3.89
10	0.35	0.61	0.32	1.08	1.28	1.22	1.15	1.43	1.74	3.77
11	0.49	0.59	0.48	0.91	1.10	1.08	1.06	1.29	1.56	3.98
12	0.45	0.45	0.59	0.90	1.20	1.05	0.93	0.99	1.33	8.16
13	0.22	0.46	0.57	1.01	0.94	0.93	0.92	1.14	1.40	4.48
14	0.37	0.34	0.46	1.06	0.74	0.77	0.80	1.09	1.31	9.67
15	0.13	0.39	0.40	1.01	0.65	0.59	0.55	0.96	1.61	5.86
16	0.09	0.31	0.40	0.57	0.65	0.66	0.67	0.89	1.35	5.41
17	0.05	0.13	0.26	0.87	0.60	0.61	0.62	0.76	0.98	3.86
18	0.05	0.23	0.27	0.65	0.45	0.52	0.60	0.60	1.18	3.34
19	0.05	0.22	0.24	0.61	0.44	0.44	0.43	0.50	1.37	4.74
20	0.06	0.26	0.14	0.47	0.38	0.39	0.40	0.42	0.70	6.21
21	0.12	0.24	0.12	0.44	0.29	0.30	0.31	0.44	0.53	2.57
22	0.11	0.25	0.08	0.33	0.26	0.27	0.28	0.38	0.66	5.36
23	0.15	0.22	0.05	0.24	0.12	0.16	0.21	0.25	0.29	3.01
24	0.20	0.21	0.05	0.18	0.07	0.09	0.12	0.23	0.30	2.65
25	0.18	0.26	0.07	0.15	0.08	0.06	0.05	0.09	0.19	3.08
26	0.19	0.31	0.10	0.09	0.11	0.06	0.01	0.06	0.07	2.12
27	0.22	0.24	0.14	0.10	0.17	0.10	0.03	0.02	0.10	2.39
28	0.24	0.30	0.14	0.17	0.19	0.15	0.10	0.09	0.21	4.59
29	0.27	0.35	0.22	0.17	0.17	0.16	0.16	0.16	0.34	1.99
30	0.29	0.35	0.18	0.22	0.28	0.28	0.25	0.19	0.32	3.90
31	0.33	0.31	0.23	0.31	0.34	0.31	0.27	0.29	0.27	2.77
32	0.20	0.24	0.22	0.22	0.27	0.24	0.20	0.21	0.30	2.24
33	0.35	0.37	0.39	0.33	0.39	0.36	0.33	0.50	0.49	3.26
34	0.39	0.34	0.32	0.46	0.41	0.34	0.32	0.42	0.58	4.91
35	0.41	0.46	0.35	0.45	0.53	0.55	0.59	0.44	0.51	2.30
36	0.48	0.48	0.45	0.48	0.51	0.45	0.40	0.51	0.57	2.99
37	0.41	0.43	0.44	0.53	0.60	0.49	0.40	0.55	0.62	3.75
38	0.50	0.45	0.56	0.67	0.73	0.69	0.66	0.63	0.76	2.53
39	0.50	0.49	0.38	0.50	0.74	0.70	0.68	0.63	0.83	2.64
40	0.43	0.42	0.40	0.76	0.72	0.71	0.70	0.81	0.81	3.09
41	0.49	0.43	0.51	0.75	0.84	0.79	0.74	0.62	0.76	3.31
42	0.55	0.47	0.51	0.80	0.89	0.81	0.74	0.77	0.85	5.52
43	0.55	0.55	0.50	0.89	0.76	0.94	1.26	0.70	0.91	3.16
44	0.42	0.57	0.60	0.93	0.86	0.85	0.84	0.96	1.26	3.80
45	0.49	0.42	0.50	0.97	1.12	1.07	1.01	1.00	1.26	7.40
46	0.50	0.55	0.62	0.97	0.98	0.93	0.89	0.87	1.30	4.13
47	0.48	0.58	0.76	1.23	0.92	0.97	1.02	1.10	1.27	4.16
48	0.46	0.50	0.67	1.11	1.03	1.12	1.23	1.11	1.34	4.16
49	0.37	0.45	0.57	0.96	1.30	1.34	1.38	1.05	1.76	4.15
50	0.11	0.31	0.59	1.31	1.13	1.21	1.32	1.26	1.21	4.14

TABLE A1(b).—Continued.

ENHANCED INLET, STATION 3

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.55
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	2.98	0.00	0.00	0.00	0.00	32.78	0.00	0.00	0.00
4	0.00	0.00	0.00	1.36	6.80	8.18	30.75	71.57	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09	2.05	0.50
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.33
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	35.08	38.88	11.90	0.00	0.00	0.00
9	4.30	27.66	321.77	0.00	23.76	23.88	6.09	13.80	38.32	0.00
10	2.73	44.96	35.40	4.22	2.25	0.93	3.90	5.62	27.24	0.00
11	1.17	5.66	27.63	6.66	2.25	3.14	1.71	2.36	6.61	100.87
12	1.47	5.83	5.05	11.73	1.44	1.77	1.49	0.84	1.04	0.00
13	1.05	3.30	4.52	2.79	2.30	1.92	0.75	0.70	1.08	0.00
14	1.36	2.80	2.82	5.60	1.20	1.15	0.76	0.52	0.70	79.20
15	0.92	2.03	2.82	4.24	1.13	0.67	0.57	0.52	0.58	0.00
16	1.42	1.95	3.22	6.38	0.70	0.75	0.39	0.46	0.69	1.26
17	1.06	2.20	2.64	1.71	0.59	0.30	0.26	0.36	0.59	2.94
18	1.20	3.68	2.20	2.02	0.46	0.25	0.27	0.27	0.40	1.05
19	1.18	1.24	1.61	2.55	0.46	0.10	0.20	0.21	0.25	2.96
20	2.37	1.24	1.19	1.20	0.39	0.07	0.06	0.06	0.27	0.00
21	0.98	2.17	1.10	1.20	0.18	0.07	0.20	0.01	0.14	58.99
22	1.39	1.77	0.99	1.07	0.14	0.08	0.20	0.11	0.11	19.01
23	1.12	1.95	0.82	1.89	0.08	0.20	0.20	0.08	0.13	139.82
24	1.21	1.70	0.96	0.84	0.04	0.23	0.27	0.20	0.16	137.07
25	2.33	1.32	1.10	0.65	0.11	0.26	0.30	0.29	0.23	32.00
26	0.98	2.77	1.37	0.89	0.09	0.36	0.29	0.29	0.26	35.65
27	1.54	2.11	1.18	0.54	0.13	0.32	0.35	0.39	0.32	20.87
28	0.83	1.65	0.60	0.32	0.14	0.22	0.22	0.28	0.20	36.76
29	1.32	2.06	0.84	0.73	0.21	0.41	0.48	0.40	0.34	0.00
30	1.47	5.20	0.87	0.89	0.26	0.46	0.47	0.46	0.38	1.39
31	1.07	3.98	1.86	0.67	0.31	0.48	0.54	0.44	0.45	0.00
32	1.54	3.07	1.11	0.63	0.29	0.47	0.58	0.55	0.47	0.00
33	0.92	3.43	1.15	0.85	0.34	0.52	0.68	0.56	0.56	0.00
34	1.16	4.55	1.38	1.49	0.37	0.64	0.58	0.69	0.59	1.70
35	1.49	4.45	1.17	1.35	0.49	0.65	0.61	0.64	0.64	0.00
36	2.32	4.21	1.53	1.82	0.42	0.71	0.78	0.56	0.52	3.67
37	2.05	3.89	2.00	1.79	0.52	0.77	0.72	0.82	0.53	102.16
38	1.64	4.29	1.65	2.12	0.56	0.63	0.86	0.73	0.62	12.53
39	1.43	5.69	2.26	1.78	0.55	0.90	0.88	0.78	0.74	0.00
40	1.52	5.88	2.79	2.27	0.68	0.89	1.02	0.98	0.89	105.88
41	3.46	5.29	2.14	4.31	0.77	0.82	0.89	0.89	0.75	64.73
42	2.49	8.56	4.46	5.44	0.98	0.88	1.05	1.09	0.91	26.92
43	2.14	8.45	3.28	4.61	0.85	0.96	1.24	1.05	0.86	33.10
44	2.83	6.88	3.15	6.92	0.93	1.20	1.14	1.25	0.84	23.23
45	7.93	8.23	2.77	8.11	1.38	1.37	1.46	1.12	0.97	22.96
46	4.06	0.00	4.68	13.41	1.35	1.31	1.50	1.43	1.28	13.19
47	41.37	0.00	13.01	8.46	1.66	1.50	1.23	1.56	1.23	45.27
48	0.00	0.00	23.45	99.30	2.68	1.51	1.93	2.25	1.43	53.31
49	0.00	0.00	0.00	0.00	39.35	4.52	1.84	2.30	1.60	13.84
50	0.00	0.00	0.00	0.00	0.00	158.64	9.93	5.97	7.07	12.56

ENHANCED INLET, STATION 4

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.00	0.00	0.00	0.00	0.00	6.27	3.10	6.04	15.62	0.00
2	0.00	0.00	0.00	0.00	102.45	2.88	1.26	3.41	11.35	96.16
3	0.00	0.00	0.00	236.97	0.00	1.40	1.34	1.95	5.79	0.00
4	0.00	23.27	57.92	0.00	8.95	0.82	0.89	0.87	6.58	0.00
5	0.00	2.55	85.26	20.99	3.71	0.82	0.76	0.69	4.10	19.19
6	0.00	0.33	0.00	7.75	1.11	0.48	0.42	0.70	2.05	0.00
7	62.13	0.17	7.23	3.70	0.87	0.79	0.70	0.81	3.41	60.74
8	0.00	0.16	3.22	1.93	1.78	0.74	0.78	0.89	2.49	22.36
9	0.00	0.25	3.22	1.56	1.55	0.71	0.76	0.64	2.35	10.36
10	0.00	1.05	2.02	1.06	1.51	0.73	0.86	0.70	1.66	16.21
11	0.00	4.94	1.44	1.07	1.70	0.77	0.86	0.85	1.84	11.10
12	29.85	6.41	1.33	0.69	1.39	0.73	0.81	0.92	1.82	14.29
13	15.80	9.44	1.27	0.76	1.51	0.71	0.80	0.83	1.93	17.69
14	54.97	2.11	1.27	0.62	1.18	0.66	0.71	0.80	1.30	21.94
15	9.59	3.42	1.11	0.73	1.38	0.88	0.74	0.74	1.28	9.32
16	50.45	4.29	1.36	0.68	1.43	1.10	0.72	0.94	1.36	9.36
17	9.55	6.77	1.14	0.66	1.13	0.77	0.80	0.84	1.19	33.53
18	7.60	4.43	1.09	0.62	1.19	0.82	0.85	0.88	1.45	14.36
19	7.88	3.37	0.92	0.70	1.27	0.92	0.93	0.99	1.30	16.33
20	9.35	2.80	0.92	0.74	1.39	0.97	0.87	0.98	1.10	14.64
21	11.88	2.93	0.77	0.79	1.15	1.03	0.88	0.99	1.42	24.92
22	7.64	4.90	0.84	0.91	1.16	1.11	0.96	1.13	1.39	17.74
23	12.86	3.38	0.82	0.74	1.15	1.00	1.25	0.92	1.47	71.82
24	9.67	4.34	0.74	0.84	1.20	1.02	1.12	1.48	1.54	7.48
25	16.27	3.70	0.65	0.77	1.10	0.93	1.02	1.00	1.48	19.27
26	9.33	3.27	0.78	0.87	1.24	0.94	1.05	1.35	1.26	21.33
27	15.49	3.23	0.69	0.90	1.32	1.50	1.07	1.11	1.29	29.25
28	11.25	3.35	0.84	1.04	1.50	1.27	1.08	1.10	1.50	23.49
29	16.31	5.63	0.93	0.97	1.27	1.67	1.25	1.04	1.29	69.65
30	12.73	4.87	0.79	1.20	1.26	1.48	1.28	1.02	1.50	10.47
31	0.00	8.20	0.78	1.66	1.27	1.50	1.67	1.00	1.07	35.49
32	7.46	11.29	0.96	3.36	1.27	1.70	1.44	0.95	1.19	13.99
33	0.00	22.04	1.33	63.32	1.31	1.87	2.16	1.28	1.03	13.82
34	0.00	3.00	5.26	0.00	1.27	3.35	1.92	1.26	0.90	8.81
35	29.77	2.83	147.20	0.00	1.44	24.73	1.97	1.65	1.11	24.61
36	31.63	6.89	0.00	0.00	2.74	0.00	2.37	1.71	1.18	9.31
37	72.59	20.21	0.00	0.00	0.00	0.00	5.74	2.02	1.40	8.17
38	9.94	2.18	0.00	0.00	0.00	0.00	0.00	2.82	2.20	35.64
39	146.17	9.70	0.00	0.00	0.00	0.00	0.00	6.52	2.53	11.08
40	0.00	66.27	0.00	0.00	0.00	0.00	0.00	51.00	3.15	35.15
41	0.00	92.40	0.00	0.00	0.00	0.00	0.00	0.00	4.15	0.00
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.72	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A1(b).—Continued.

ENHANCED INLET, STATION 5

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	7.75	5.22	8.94	2.65
2	0.00	0.00	0.00	0.00	12.86	3.92	2.95	4.38	6.78	1.84
3	0.00	0.00	0.00	27.13	13.57	3.23	3.63	3.00	6.50	9.93
4	0.00	0.00	179.56	6.26	7.12	2.09	1.68	2.99	4.23	2.54
5	41.13	0.00	147.03	5.67	12.01	2.43	2.10	1.98	4.29	3.39
6	125.62	0.00	17.84	4.38	15.00	1.85	1.88	2.19	3.20	1.46
7	48.98	0.00	7.91	4.19	5.94	1.76	1.64	2.50	4.38	2.64
8	53.41	0.00	6.56	3.02	4.43	1.65	1.96	1.67	4.39	1.44
9	56.46	0.00	6.50	2.11	6.38	1.52	1.26	2.12	2.50	1.62
10	0.00	0.00	6.08	2.00	3.76	1.54	1.60	1.69	2.67	1.99
11	123.79	0.00	5.29	1.63	2.94	1.50	1.99	1.45	2.83	0.83
12	0.00	0.00	3.10	1.23	3.33	1.36	1.81	1.75	2.17	2.58
13	134.46	21.72	3.36	1.16	2.36	1.46	1.43	1.53	2.91	1.55
14	70.80	0.00	2.89	1.06	2.38	1.59	1.22	1.26	2.20	1.95
15	168.39	42.03	2.44	1.06	3.52	1.44	1.31	1.93	2.16	2.77
16	136.41	88.01	2.85	0.97	3.08	1.53	1.19	1.39	2.59	1.28
17	49.57	53.55	3.14	1.07	2.71	1.54	1.23	1.36	1.92	1.43
18	26.30	27.03	2.25	0.97	2.40	1.37	1.17	1.44	2.10	1.61
19	25.77	22.93	1.97	0.98	3.12	1.45	1.10	1.41	1.81	1.55
20	20.05	17.76	1.91	1.03	3.17	1.28	1.11	1.10	1.54	1.18
21	16.08	17.59	2.11	1.11	2.38	1.26	1.19	1.35	1.87	1.53
22	11.82	26.38	1.95	1.11	2.34	1.27	1.29	1.19	1.67	0.93
23	15.11	17.53	1.55	1.35	2.04	1.30	1.06	1.35	1.64	0.98
24	13.14	10.72	1.52	1.32	2.29	1.31	1.25	1.17	2.00	1.40
25	10.64	33.69	1.64	1.53	2.51	1.38	1.28	1.07	1.40	1.01
26	16.88	26.99	1.48	1.49	2.63	1.47	1.26	1.25	1.54	1.15
27	13.76	14.68	1.69	1.39	2.25	1.71	0.86	1.17	1.31	1.26
28	7.14	10.42	1.37	1.79	2.47	1.94	1.00	0.97	1.22	1.02
29	28.42	18.90	1.44	1.95	2.46	3.06	1.10	1.11	1.25	0.91
30	9.18	21.50	1.41	2.08	3.52	2.69	1.27	0.99	1.27	1.04
31	9.31	24.91	1.22	1.69	2.68	2.78	1.14	1.20	1.32	0.95
32	15.87	22.55	1.68	1.94	3.24	2.84	1.40	0.90	1.29	1.01
33	7.74	20.98	1.32	1.79	3.41	3.18	1.54	1.11	1.46	0.80
34	10.03	20.88	1.42	4.70	3.87	3.47	1.81	1.17	1.55	0.72
35	5.13	21.18	1.34	19.85	3.62	4.38	2.13	1.46	1.94	0.80
36	10.82	14.10	1.35	0.00	2.85	8.31	2.49	2.12	2.42	0.69
37	3.00	34.67	1.98	0.00	4.31	97.23	2.95	2.29	3.23	0.58
38	2.51	0.00	5.20	0.00	8.34	0.00	2.77	2.68	5.56	0.40
39	0.48	126.93	0.95	0.00	14.21	0.00	7.56	3.76	14.04	0.44
40	19.52	138.68	0.05	0.00	47.52	0.00	2.08	1.35	13.21	0.55
41	0.00	0.00	0.00	0.00	0.00	0.00	14.20	5.71	19.14	2.34
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00	21.42
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.13	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENHANCED INLET, STATION 6

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	0.00	0.00	0.00	39.81	20.80	12.35	3.16	2.02	4.19	
3	47.29	0.00	0.00	114.54	14.78	13.20	2.17	1.81	4.79	
4	21.14	28.06	191.09	49.95	17.15	7.76	1.74	1.68	3.84	
5	16.54	43.87	21.55	59.64	7.43	5.70	1.54	1.36	4.35	
6	28.10	18.99	21.03	35.79	8.37	4.20	1.53	1.24	3.32	
7	119.31	30.80	17.50	23.63	4.67	3.07	1.17	1.43	3.17	
8	32.50	15.96	19.22	12.00	4.66	2.71	1.14	1.18	4.74	
9	53.42	9.74	8.80	12.97	3.05	3.06	1.00	1.23	3.09	
10	39.25	20.95	4.81	6.98	2.34	1.84	0.98	0.93	2.72	
11	24.23	8.38	6.77	5.97	2.09	2.23	1.02	1.16	2.83	
12	42.21	11.91	3.99	4.68	1.69	1.96	0.97	1.11	2.46	
13	28.48	9.24	3.63	3.65	1.53	2.03	0.93	1.02	2.47	
14	15.62	10.89	3.24	2.92	1.61	1.82	0.86	1.06	2.81	
15	26.43	6.01	3.08	3.30	1.23	1.73	0.86	1.05	1.88	
16	15.41	6.66	4.45	2.59	1.28	1.84	0.77	0.98	2.64	
17	10.82	9.07	2.87	3.44	1.25	1.84	0.93	0.94	1.95	
18	18.08	7.12	3.36	2.90	1.36	1.87	0.84	1.00	2.10	
19	7.41	6.48	3.41	3.37	1.27	1.63	0.90	1.07	1.70	
20	11.84	8.74	2.90	2.62	1.22	1.48	0.83	1.01	2.10	
21	20.19	9.03	3.24	2.77	1.21	1.69	0.74	0.75	2.13	
22	12.53	6.39	2.39	2.55	1.02	1.63	0.81	0.84	1.67	
23	10.30	8.16	2.64	2.69	1.19	1.53	0.79	0.96	2.08	
24	10.43	5.96	3.15	2.48	1.19	1.66	0.71	0.82	1.96	
25	11.10	8.37	2.91	2.87	1.18	1.62	0.96	0.89	1.78	
26	11.48	7.13	3.11	2.75	1.09	1.69	0.70	0.95	1.78	
27	12.23	5.08	1.87	1.83	0.71	1.03	0.52	0.52	1.15	
28	13.68	6.94	3.02	2.45	1.17	1.48	0.74	0.72	1.81	
29	34.32	6.23	2.42	3.05	1.15	1.56	0.71	0.71	1.73	
30	19.02	5.19	2.91	2.68	1.12	1.34	0.69	0.85	1.46	
31	19.12	6.05	3.81	2.69	1.21	1.73	0.67	0.73	1.48	
32	43.81	7.95	3.93	4.29	1.44	1.94	0.76	0.85	1.58	
33	0.00	9.74	4.48	3.61	1.57	1.91	0.95	0.78	1.34	
34	19.03	5.27	5.95	8.99	1.54	1.96	0.96	0.70	1.68	
35	31.22	1.93	10.07	7.57	2.05	2.33	1.15	0.82	1.71	
36	55.25	18.06	9.97	7.66	2.19	2.17	1.23	0.87	1.65	
37	25.51	17.49	13.55	16.93	2.45	2.62	1.30	1.18	1.50	
38	0.00	17.97	9.97	13.01	2.71	2.83	1.29	1.46	2.10	
39	0.54	15.06	14.14	21.66	3.35	2.34	1.27	2.17	2.40	
40	0.92	24.31	13.36	27.72	4.99	3.72	1.50	1.80	2.85	
41	0.00	42.90	32.11	0.52	17.09	0.95	3.72	2.53	6.48	
42	0.00	0.00	0.00	23.78	0.00	59.17	5.40	1.16	15.94	
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

TABLE A1(b).—Concluded.

ENHANCED INLET, STATION 7

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	9.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	10.24	21.89	39.42	121.23	22.29	6.46	5.24	4.68	0.00
4	0.00	13.12	25.66	23.52	0.00	17.02	4.69	4.98	4.24	0.00
5	0.00	4.90	27.80	86.64	351.43	16.01	3.94	2.92	3.69	0.00
6	0.00	11.68	22.02	28.57	39.78	7.75	2.83	2.51	3.87	0.00
7	0.00	7.90	0.00	7.48	23.12	6.18	2.34	2.13	3.56	0.00
8	0.00	4.42	0.00	5.78	15.90	5.49	1.74	2.48	2.73	0.00
9	0.00	6.77	6.07	9.84	21.15	3.27	1.83	2.03	4.00	0.00
10	0.00	4.73	3.87	5.72	11.08	2.60	1.56	1.55	4.69	0.00
11	0.00	5.36	2.95	4.36	7.92	2.27	1.43	1.58	3.34	0.00
12	0.00	0.00	2.75	3.74	5.73	1.79	1.42	1.61	3.46	0.00
13	0.00	0.00	2.40	3.29	5.25	1.38	1.25	1.62	3.18	0.00
14	0.00	0.00	1.77	2.28	3.28	1.33	1.33	1.49	2.31	0.00
15	0.00	0.00	1.73	2.20	3.03	1.11	1.41	1.40	2.96	0.00
16	0.00	4.94	1.55	2.27	4.41	1.31	1.38	1.75	2.67	0.00
17	0.00	0.00	1.75	2.32	3.49	1.28	1.42	1.49	3.00	0.00
18	13.78	0.00	1.53	2.13	3.62	1.14	1.31	1.69	2.70	0.00
19	0.00	5.46	1.54	2.04	3.09	1.20	1.01	1.36	2.96	0.00
20	0.00	1.61	0.92	1.19	1.73	0.74	0.79	0.83	1.49	0.00
21	0.00	4.56	1.56	2.07	3.13	1.08	1.28	1.21	2.84	0.00
22	0.00	0.00	1.78	2.09	2.56	1.18	1.23	1.41	2.80	0.00
23	0.00	0.00	1.73	1.95	2.26	1.07	1.10	1.19	2.39	0.00
24	0.00	3.94	1.37	1.71	2.34	1.02	1.10	1.16	2.95	0.00
25	0.00	0.00	1.34	1.69	2.32	1.01	1.07	1.21	2.21	0.00
26	0.00	0.00	1.56	2.02	2.93	0.97	1.05	1.18	1.91	90.07
27	0.00	4.58	1.31	1.66	2.34	0.94	1.24	1.40	2.47	0.00
28	0.00	3.82	1.37	1.68	2.22	1.10	1.00	1.25	2.12	0.00
29	0.00	4.43	1.37	1.66	2.13	0.93	1.07	1.31	2.03	0.00
30	0.00	0.00	1.18	1.59	2.51	1.00	1.11	1.30	1.99	0.00
31	0.00	3.19	1.19	1.49	2.03	0.90	0.98	1.18	2.21	0.00
32	0.00	3.79	1.14	1.43	1.93	0.98	1.06	1.16	2.85	98.95
33	0.00	2.91	1.20	1.41	1.74	0.85	1.10	1.28	1.97	0.00
34	0.00	4.94	1.28	1.52	1.89	0.80	0.96	1.14	2.19	0.00
35	0.00	0.00	1.41	1.60	1.87	0.89	0.96	1.16	2.42	0.00
36	7.96	0.00	1.30	1.59	2.05	0.96	0.92	1.03	1.81	0.00
37	6.95	5.31	1.33	1.53	1.82	0.81	0.92	1.11	1.70	0.00
38	0.00	0.00	1.58	1.73	1.93	0.85	0.97	1.32	1.88	0.00
39	0.00	5.59	1.40	1.61	1.92	0.77	0.81	1.09	2.29	0.00
40	0.00	4.87	1.38	1.67	2.14	0.84	0.95	1.30	1.96	0.00
41	0.00	3.55	1.57	1.84	2.24	1.06	0.84	1.35	2.24	104.67
42	1.75	1.22	1.40	1.70	2.20	1.08	0.77	1.48	2.20	0.00
43	0.00	0.62	1.45	1.75	2.25	0.99	0.46	2.15	2.13	0.00
44	0.00	1.02	0.77	0.96	1.94	0.97	0.41	2.49	2.08	0.00
45	3.59	10.22	0.74	0.56	0.45	1.95	0.63	3.34	5.14	13.05
46	0.18	0.00	0.00	4.89	4.89	12.07	6.76	4.88	7.05	0.15
47	0.04	212.38	0.00	0.00	0.00	0.00	0.00	21.70	31.37	0.38
48	0.06	16.93	0.00	0.00	0.00	0.00	84.27	14.79	7.17	61.29
49	0.00	0.00	0.00	0.00	0.00	278.45	18.65	11.11	6.65	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENHANCED INLET, STATION 8

CP	ET1	ET2	ET3	ET4	ET5	ET6	ET7	ET8	ET9	ET10-% TANG ERROR
1	0.00	23.49	0.32	11.09	0.00	65.17	21.86	11.51	19.78	10.39
2	0.00	5.03	0.39	4.21	0.00	61.24	29.99	19.03	28.76	50.71
3	0.00	3.46	0.33	2.94	0.00	65.69	17.11	4.78	27.93	14.18
4	0.00	7.03	0.25	4.00	0.00	37.67	19.00	15.45	21.89	12.02
5	0.00	3.64	0.16	2.47	0.00	53.92	13.33	11.72	39.53	63.32
6	0.00	1.56	0.18	1.89	0.00	175.25	13.35	5.82	25.26	17.99
7	0.00	2.63	0.19	0.85	0.00	50.25	9.82	7.59	21.33	12.07
8	0.00	6.29	0.65	101.34	0.00	53.94	5.49	5.30	22.70	10.61
9	0.00	4.18	3.15	217.98	0.00	30.83	5.04	3.65	14.49	12.04
10	0.00	3.23	0.00	32.73	0.00	11.26	3.07	2.40	17.58	9.30
11	0.00	5.21	0.00	21.17	0.00	9.92	2.39	2.56	10.28	5.72
12	0.00	4.03	0.00	0.00	0.00	6.86	1.99	2.53	12.23	10.14
13	0.00	3.58	0.00	16.28	0.00	5.91	1.73	1.99	10.20	7.50
14	0.00	1.56	0.00	13.17	0.00	5.27	1.34	1.86	8.13	18.77
15	0.00	2.67	0.00	11.01	0.00	4.01	1.12	1.75	26.47	6.42
16	0.00	2.22	0.00	10.90	0.00	3.12	1.11	1.70	10.94	6.43
17	0.00	2.26	0.00	6.66	0.00	2.44	0.97	2.14	12.69	5.72
18	0.00	1.86	0.00	3.95	0.00	1.61	0.66	0.97	4.73	3.99
19	0.00	3.00	0.00	4.70	0.00	2.31	1.13	1.53	6.93	4.31
20	0.00	3.03	0.00	5.24	0.00	3.09	0.86	1.54	9.76	3.90
21	0.00	1.50	0.00	0.00	48.94	2.25	0.85	1.44	7.33	5.23
22	0.00	2.84	0.00	4.60	0.00	2.37	0.95	1.38	8.87	5.21
23	0.00	4.34	0.00	4.85	0.00	2.20	0.00	1.56	5.29	7.57
24	0.00	3.41	0.00	4.02	0.00	2.17	0.86	1.48	5.19	4.06
25	0.00	2.17	0.00	4.05	0.00	2.35	0.81	1.65	5.86	3.12
26	0.00	3.19	0.00	3.40	77.30	2.01	0.86	1.19	5.80	4.16
27	0.00	3.56	0.00	4.04	0.00	2.15	0.89	1.37	5.21	6.87
28	0.00	2.82	85.23	3.46	0.00	1.99	0.88	1.21	3.81	3.78
29	0.00	2.55	0.00	3.76	0.00	2.31	0.88	1.45	5.31	3.36
30	0.00	2.63	0.00	4.19	0.00	2.03	0.85	1.25	8.44	5.79
31	0.00	2.63	0.00	3.92	0.00	2.19	0.88	1.45	3.63	5.05
32	0.00	4.69	0.00	3.29	0.00	2.07	0.85	1.21	3.06	5.05
33	0.00	2.66	0.00	2.82	44.98	2.34	0.78	1.60	4.65	7.16
34	0.00	1.76	0.00	2.58	36.36	1.78	0.95	1.27	5.51	4.62
35	0.00	4.78	0.00	4.46	53.09	1.77	0.78	1.39	4.97	3.51
36	0.00	2.35	17.04	4.38	0.00	2.15	0.81	1.26	3.44	3.02
37	0.00	2.71	3.05	3.50	0.00	1.87	0.76	1.40	3.14	3.96
38	0.00	2.32	2.98	3.61	0.00	2.03	0.77	1.00	3.39	3.32
39	0.00	2.73	0.58	3.47	52.23	1.56	0.72	1.20	3.81	6.07
40	0.00	2.66	0.10	3.94	17.02	1.61	0.70	1.20	4.08	2.95
41	0.00	2.14	0.03	3.18	10.69	1.46	0.64	1.08	3.85	3.17
42	0.03	1.94	0.08	2.66	39.75	1.78	0.68	1.04	3.50	3.72
43	0.66	1.49	8.60	1.74	7.75	1.42	0.60	1.12	4.56	2.11
44	4.84	0.56	0.00	1.45	2.57	1.40	0.64	1.19	4.82	4.41
45	0.00	0.27	0.00	1.37	2.27	1.30	0.56	1.03	3.79	2.22
46	0.00	0.16	0.00	1.09	1.14	1.07	0.52	0.92	3.14	2.06
47	2.83	0.29	57.61	1.00	0.59	0.64	0.49	0.94	3.43	3.00
48	0.27	0.61	1.97	2.14	0.82	1.02	0.58	1.22	3.46	4.53
49	0.22	1.00	0.81	15.92	3.44	2.39	1.21	2.02	3.90	1.78
50	1.42	2.02	0.93	52.18	0.00	12.02	5.61	6.24	12.56	2.25

TABLE A2.—RELATIVE TOTAL (AXIAL/RELATIVE TANGENTIAL) VELOCITIES

(m/sec)

BASELINE INLET, STATION 1

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	204.52	214.07	219.45	228.05	235.46	243.23	250.56	258.63	269.01	274.12
2	204.56	214.79	219.75	228.63	234.44	243.16	250.78	258.87	267.60	266.75
3	203.37	215.04	220.01	227.87	234.72	243.08	250.19	258.20	268.34	269.52
4	204.44	214.54	219.78	228.08	234.68	243.39	250.17	258.10	270.93	267.78
5	203.69	214.43	220.13	228.07	234.15	243.65	250.39	258.09	267.83	273.79
6	204.93	214.14	219.85	228.42	234.62	243.45	250.30	258.76	267.37	272.61
7	205.07	214.76	219.96	228.57	235.30	243.43	250.45	257.91	267.62	280.68
8	204.54	214.64	220.55	227.67	234.24	242.62	249.91	258.87	268.97	275.41
9	204.35	213.31	219.82	228.52	234.26	242.27	250.97	258.15	268.01	271.16
10	202.00	213.91	219.74	228.05	234.10	242.58	249.88	258.22	268.26	277.13
11	205.06	213.67	219.05	227.50	233.57	243.22	250.98	258.54	269.45	270.55
12	204.72	214.63	219.87	228.07	234.81	243.06	249.92	258.95	271.24	272.42
13	204.93	214.14	219.55	228.09	234.49	242.53	249.85	257.72	268.77	274.13
14	204.41	213.45	219.18	227.71	234.64	243.41	250.84	257.97	270.92	274.90
15	203.74	214.34	219.51	228.37	233.52	242.87	250.47	258.35	267.75	272.72
16	204.94	214.18	219.23	227.91	234.66	242.67	250.02	258.28	268.02	279.78
17	205.10	214.09	219.57	228.33	233.98	242.54	250.75	258.45	270.30	272.87
18	205.21	213.92	219.65	228.11	234.01	242.08	250.82	258.50	268.98	269.94
19	204.79	214.54	219.52	228.57	234.62	242.29	251.21	258.42	269.01	272.45
20	204.53	214.04	219.59	228.29	234.38	243.05	250.87	258.08	268.71	266.50
21	204.05	214.80	219.45	228.00	234.76	242.37	250.27	258.69	267.66	273.00
22	205.20	214.04	219.21	227.76	235.06	242.94	250.03	258.73	268.91	266.95
23	204.71	214.70	220.25	227.74	234.93	242.47	250.38	259.24	269.41	270.52
24	203.14	214.42	219.78	227.72	234.46	242.88	250.65	258.19	268.01	279.81
25	205.69	214.94	219.83	227.87	234.65	242.34	250.77	259.25	269.90	266.90
26	204.55	214.65	219.78	227.66	234.85	242.68	249.73	258.09	269.29	279.08
27	205.29	215.03	219.77	228.59	234.00	243.02	251.23	258.80	271.12	266.68
28	202.63	214.07	219.75	227.65	234.57	242.91	250.67	259.41	269.55	272.85
29	204.81	214.18	219.90	228.08	234.63	243.18	250.47	258.24	270.72	277.71
30	203.73	213.77	220.04	228.04	233.71	243.08	250.62	258.20	268.34	271.34
31	204.15	214.23	220.06	228.11	234.20	242.84	250.00	258.23	268.29	271.63
32	204.72	214.62	219.68	227.58	234.09	242.38	251.41	259.24	268.53	272.56
33	203.99	214.93	220.36	228.56	234.56	243.53	250.77	258.95	268.73	271.77
34	203.95	213.99	219.98	227.64	235.07	242.77	251.29	259.60	269.17	272.79
35	204.39	215.15	220.58	227.92	234.75	243.63	250.60	258.35	271.22	268.82
36	204.32	213.88	220.61	229.06	234.88	242.52	249.97	258.94	267.17	276.75
37	203.62	214.60	219.81	228.29	234.36	243.19	251.32	258.12	268.16	272.69
38	205.36	214.88	219.78	228.87	234.52	243.30	251.22	258.96	268.08	272.13
39	205.60	214.51	219.41	228.06	235.09	242.88	250.17	259.90	270.71	272.38
40	204.01	214.21	219.07	228.05	234.50	243.63	250.94	259.34	269.48	269.68
41	204.90	214.33	220.30	227.81	233.97	243.22	251.04	258.73	269.90	271.29
42	204.44	214.03	219.80	228.96	234.82	243.15	251.16	259.16	272.00	272.53
43	205.04	213.76	219.48	227.64	234.47	243.28	251.20	258.76	270.50	273.12
44	202.95	214.48	219.63	228.80	234.43	243.36	251.11	258.56	271.63	270.70
45	204.18	214.05	219.89	227.50	234.90	242.72	251.35	258.71	269.91	274.95
46	203.88	214.98	220.02	227.85	234.42	243.48	251.29	259.69	270.05	274.72
47	205.12	214.45	218.87	228.52	235.35	244.15	250.60	259.98	268.07	280.74
48	206.31	214.81	219.66	227.85	234.48	243.20	251.33	259.93	268.68	288.39
49	205.00	215.11	219.14	227.66	234.82	242.41	249.89	258.31	268.01	265.59
50	201.31	211.36	219.52	225.29	231.30	240.40	249.27	258.00	264.54	252.97

BASELINE INLET, STATION 2

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	246.13	238.76	229.22	225.45	215.70	202.42	236.84	232.23	233.66	291.15
2	251.82	248.29	237.40	239.02	231.04	213.06	264.05	255.39	249.29	286.37
3	250.90	252.97	245.63	237.16	246.30	230.45	275.23	273.05	279.11	286.03
4	250.68	256.13	252.77	254.47	255.10	245.65	287.61	287.92	287.90	294.96
5	247.90	258.38	256.30	260.22	259.48	256.28	291.75	295.92	284.81	286.66
6	245.24	257.64	258.04	262.96	266.15	263.54	294.48	302.84	293.84	291.94
7	242.10	255.94	261.27	265.29	267.23	269.75	298.71	306.47	306.27	279.03
8	240.10	253.84	262.76	269.15	268.94	273.40	296.50	304.72	308.26	285.51
9	237.37	252.00	260.65	258.03	268.98	276.14	296.24	304.70	303.67	285.21
10	235.16	249.90	260.10	269.33	269.43	278.49	291.88	303.71	302.53	278.93
11	232.65	246.67	260.99	271.60	268.70	278.01	291.36	302.27	309.33	291.78
12	231.00	244.73	257.02	268.99	268.06	279.72	289.94	298.44	306.81	312.86
13	228.54	241.86	253.35	267.40	267.69	279.38	287.67	298.68	311.07	301.58
14	226.78	240.65	255.33	267.28	265.84	280.01	285.00	295.53	307.82	286.15
15	224.06	238.79	250.28	261.42	263.97	278.48	282.08	291.24	299.39	291.14
16	223.31	235.00	250.51	263.11	262.85	278.15	278.24	289.54	299.36	323.07
17	220.81	230.97	248.58	264.18	259.90	276.50	276.68	288.70	298.37	281.57
18	220.13	230.67	247.86	256.72	258.69	274.70	276.94	286.63	300.45	297.40
19	217.99	231.07	244.35	255.49	257.42	272.87	273.83	282.08	292.50	255.74
20	216.97	227.95	241.54	255.36	256.32	271.63	270.45	280.60	294.28	274.52
21	215.64	224.98	238.52	253.17	253.39	271.79	269.31	278.65	287.93	281.23
22	214.11	224.27	240.42	249.30	251.44	268.10	265.99	274.76	289.05	274.35
23	213.16	222.55	234.29	244.96	248.42	268.30	263.93	274.13	284.77	289.07
24	211.46	221.80	233.45	244.15	246.60	266.44	260.32	269.36	279.50	260.41
25	210.46	220.13	233.11	250.21	245.73	263.85	259.35	268.06	276.81	288.51
26	209.32	218.06	227.94	240.67	242.87	263.69	257.13	264.36	281.94	301.90
27	208.45	215.30	227.19	238.68	240.99	260.49	255.62	264.47	276.40	267.90
28	206.43	215.21	224.64	229.54	237.66	258.49	254.34	260.74	271.57	294.05
29	204.98	213.36	222.20	240.69	236.27	255.77	249.10	260.27	273.09	260.75
30	203.31	212.34	223.21	236.16	234.10	255.94	248.18	256.19	264.97	277.28
31	201.56	210.62	219.61	235.97	232.81	252.97	245.31	255.31	262.59	245.06
32	198.25	204.58	218.61	227.16	228.64	249.09	239.47	244.32	249.12	267.27
33	198.56	206.90	217.12	234.37	229.25	248.96	243.51	250.38	259.43	280.37
34	196.27	205.66	214.14	225.11	227.45	246.46	240.50	248.77	261.45	250.61
35	194.95	203.48	212.72	223.87	224.48	245.00	238.57	246.69	254.65	259.89
36	192.76	201.54	208.93	222.19	222.25	242.54	237.00	244.74	256.95	259.22
37	191.93	200.64	210.47	224.20	220.50	239.97	236.02	243.69	254.74	241.48
38	190.69	198.86	207.21	227.57	218.90	239.11	234.17	240.70	253.64	242.70
39	188.11	199.01	205.23	223.02	216.78	236.07	231.11	238.41	249.85	239.28
40	187.52	193.44	201.36	229.63	215.06	234.49	228.29	235.58	251.96	263.37
41	186.39	192.44	200.87	211.12	213.51	232.46	225.68	235.99	249.74	271.59
42	185.47	193.02	197.84	203.49	210.03	229.67	223.98	232.41	244.88	245.25
43	183.36	189.49	195.24	218.96	208.47	227.15	220.94	229.77	247.46	273.39
44	181.58	188.19	193.99	208.05	205.86	226.02	218.19	226.44	237.15	241.77
45	181.08	188.22	192.14	198.36	203.16	223.26	215.18	223.87	235.26	248.14
46	183.91	185.91	187.06	198.54	199.73	218.66	212.17	220.65	234.35	242.45
47	188.24	189.25	187.23	195.33	197.73	215.18	207.73	216.30	228.78	273.42
48	202.51	195.59	188.11	195.60	193.49	210.95	203.15	210.63	226.14	217.55
49	223.22	206.42	197.87	207.91	194.24	207.21	200.05	206.03	216.43	243.66
50	237.76	227.46	214.40	214.17	198.80	202.76	207.23	207.23	219.81	271.13

TABLE A2.—Continued.

BASELINE INLET, STATION 3

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	*******	196.76	222.79	219.89	0.00	263.02	0.00	0.00	0.00	
2	0.00	205.84	171.85	0.00	0.00	239.97	0.00	246.79	265.85	
3	222.36	87.62	229.24	133.18	209.18	225.45	250.21	235.51	265.70	
4	0.00	0.00	97.16	48.90	1618.72	80.82	72.26	219.65	267.57	
5	0.00	0.00	0.00	0.00	0.00	0.00	101.70	79.40	249.81	
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	294.42	
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8	256.57	0.00	0.00	251.41	173.74	296.75	0.00	0.00	0.00	
9	0.00	261.67	270.49	273.86	224.18	295.75	306.02	226.75	0.00	
10	248.66	259.89	267.44	278.63	283.71	298.15	302.42	284.58	0.00	
11	246.26	262.16	263.25	280.19	286.63	292.69	302.10	300.36	249.59	
12	241.79	259.57	266.01	276.50	287.52	291.13	300.96	295.57	307.87	
13	236.67	252.94	269.94	266.18	282.82	287.69	299.96	299.97	301.03	
14	218.12	244.45	258.96	266.21	281.69	286.88	297.87	293.24	309.99	
15	234.70	238.88	264.00	267.61	279.04	282.39	291.93	295.96	276.72	
16	232.80	245.24	255.74	267.24	277.47	279.07	290.30	290.47	386.99	
17	223.59	242.56	258.60	258.68	274.55	277.26	285.67	287.33	295.46	
18	224.67	238.45	252.75	258.92	273.15	275.21	285.74	286.67	290.18	
19	199.08	234.18	247.69	258.78	269.92	273.04	280.46	284.62	263.53	
20	222.31	235.15	248.08	252.20	267.79	268.87	279.16	279.54	248.07	
21	223.07	231.34	244.97	254.58	265.00	266.60	277.51	280.74	237.52	
22	221.49	218.60	245.44	251.32	263.51	262.62	273.56	282.75	230.92	
23	218.51	230.33	245.15	245.22	261.57	264.74	272.53	276.79	240.79	
24	210.25	212.55	237.02	241.37	257.80	260.96	269.20	270.11	251.78	
25	213.76	224.38	234.52	240.36	255.45	258.50	268.47	264.91	257.39	
26	213.35	212.07	232.61	238.61	254.67	255.37	264.00	264.69	279.85	
27	211.37	219.55	232.08	237.68	252.11	252.17	262.70	260.20	297.87	
28	208.93	213.51	222.78	232.42	249.06	247.21	258.89	258.08	293.98	
29	203.33	212.01	230.25	233.83	247.23	248.13	257.96	258.87	294.78	
30	199.70	211.38	224.43	229.44	245.44	246.76	254.65	252.07	324.19	
31	200.58	206.20	222.83	227.77	242.91	242.37	254.01	253.92	260.73	
32	191.65	206.24	220.58	225.68	241.31	241.95	251.01	253.92	286.27	
33	199.54	205.17	216.78	222.79	238.91	239.54	248.83	248.99	218.26	
34	197.34	203.32	217.70	218.04	235.42	237.42	245.35	249.13	372.78	
35	193.13	201.62	210.14	218.99	234.25	237.15	243.82	246.37	256.78	
36	192.61	194.72	212.38	214.49	232.42	233.33	243.05	243.26	288.66	
37	185.45	192.90	203.88	210.27	229.38	227.78	237.51	242.41	249.12	
38	183.79	192.71	204.89	208.92	226.70	226.41	236.55	239.12	351.81	
39	181.68	189.26	205.64	203.76	224.26	223.61	235.12	237.07	236.93	
40	180.35	185.28	199.04	203.62	221.13	218.89	229.62	238.71	231.46	
41	172.51	182.18	191.14	197.72	218.94	215.93	225.57	232.36	250.53	
42	163.82	179.40	186.31	197.09	214.17	210.92	222.67	227.53	280.04	
43	158.18	173.63	186.75	187.00	210.70	205.00	218.06	223.17	254.50	
44	156.54	168.43	181.02	188.39	207.33	199.98	212.46	219.34	324.63	
45	158.34	169.46	178.72	181.47	202.09	194.97	204.94	212.49	236.48	
46	150.80	165.69	168.19	182.75	197.46	189.63	199.99	206.86	238.47	
47	0.00	161.96	184.37	174.99	193.31	186.99	194.03	200.84	228.63	
48	0.00	159.15	0.00	0.00	190.67	186.44	193.02	194.48	239.13	
49	0.00	0.00	0.00	0.00	0.00	184.56	191.98	202.36	0.00	
50	221.88	204.32	0.00	0.00	0.00	223.35	204.50	0.00	0.00	

BASELINE INLET, STATION 4

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	0.00	0.00	0.00	0.00	0.00	212.73	251.03	234.80	191.75	160.37
2	0.00	0.00	0.00	218.18	220.75	224.15	253.47	260.33	240.34	175.03
3	0.00	0.00	214.86	211.20	219.61	238.10	251.84	258.21	240.93	210.80
4	281.20	213.29	222.96	221.85	223.66	236.09	250.34	253.86	254.51	217.44
5	194.49	213.15	220.61	229.03	226.33	233.96	248.34	253.97	248.22	223.24
6	186.90	209.25	219.20	223.67	218.60	225.33	230.36	248.58	232.32	208.01
7	187.73	208.33	220.40	229.61	232.31	235.24	243.35	253.78	251.32	242.70
8	155.42	204.58	218.40	226.91	230.41	234.22	240.73	257.13	249.51	234.85
9	131.64	204.78	215.58	223.41	228.52	233.90	239.11	251.06	251.45	243.68
10	127.73	202.10	215.15	222.06	226.79	231.81	239.70	251.20	250.67	235.37
11	125.65	201.22	212.55	219.63	224.85	230.27	236.65	248.62	248.43	240.71
12	130.67	198.91	210.34	217.54	221.91	226.58	234.84	246.80	248.03	239.06
13	143.04	198.53	206.95	215.11	221.13	227.37	233.21	241.98	248.70	239.69
14	167.21	196.01	204.35	212.01	218.34	224.84	231.70	240.69	244.92	240.03
15	126.12	193.06	202.72	209.79	214.40	222.77	227.28	240.55	248.41	242.22
16	153.81	191.90	201.81	207.24	212.00	219.51	226.48	236.08	245.20	239.12
17	142.98	192.02	197.84	206.23	209.24	218.97	224.29	234.04	240.99	227.39
18	155.33	190.28	196.56	203.39	207.72	215.83	223.00	234.04	242.17	228.51
19	135.07	186.27	194.74	201.31	205.95	213.11	220.22	229.74	240.77	222.99
20	156.99	184.38	193.60	197.91	203.83	212.23	218.23	226.62	236.32	219.16
21	165.62	184.62	190.34	198.34	202.39	209.66	215.49	226.26	234.25	216.19
22	164.59	181.62	189.83	195.64	200.94	208.39	214.19	221.85	234.26	217.56
23	164.19	180.50	188.12	195.05	199.27	206.71	211.72	222.49	230.83	219.62
24	157.15	180.06	186.34	192.77	199.18	203.61	209.31	218.71	228.95	206.89
25	159.64	175.84	185.63	191.79	198.70	202.07	208.96	219.56	227.71	205.57
26	167.18	176.97	182.98	190.86	197.91	200.18	206.09	215.65	224.15	219.57
27	0.00	175.04	181.43	188.51	185.20	200.02	207.22	215.14	224.77	207.30
28	0.00	169.94	180.42	186.56	0.00	199.42	206.29	214.01	225.55	210.86
29	229.26	170.60	179.52	187.32	0.00	198.41	203.73	213.33	222.90	215.28
30	0.00	170.08	179.81	185.51	0.00	197.87	203.93	211.13	222.20	214.44
31	157.99	168.20	178.22	184.67	0.00	197.40	204.45	212.83	219.39	217.19
32	0.00	171.92	178.22	184.71	0.00	197.64	203.75	211.51	221.10	217.41
33	0.00	170.32	179.43	182.00	0.00	196.95	203.49	211.92	220.59	217.11
34	0.00	162.93	179.98	185.63	0.00	198.21	205.09	211.65	220.02	212.35
35	0.00	136.53	181.37	174.56	0.00	196.17	203.74	213.63	222.60	218.68
36	0.00	0.00	0.00	0.00	0.00	196.18	199.79	211.55	222.01	218.98
37	0.00	0.00	0.00	0.00	0.00	192.80	197.03	209.42	222.68	219.98
38	0.00	0.00	0.00	0.00	0.00	206.08	0.00	212.08	225.77	217.74
39	0.00	0.00	0.00	0.00	0.00	191.19	0.00	0.00	215.78	223.50
40	0.00	0.00	0.00	0.00	206.26	0.00	0.00	0.00	217.96	0.00
41	0.00	0.00	0.00	0.00	210.35	0.00	0.00	0.00	0.00	0.00
42	0.00	0.00	0.00	0.00	208.77	0.00	0.00	0.00	0.00	0.00
43	0.00	0.00	0.00	0.00	207.97	221.51	207.68	259.94	289.64	256.12
44	0.00	0.00	0.00	0.00	190.90	213.11	251.75	274.88	489.34	274.03
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	69.21	148.96
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A2.—Continued.

BASELINE INLET, STATION 5

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	209.23	189.49	0.00
2	0.00	0.00	0.00	0.00	178.38	157.30	217.61	201.96	186.13	146.44
3	0.00	0.00	205.55	198.08	192.20	185.45	213.20	215.78	163.89	192.33
4	153.43	197.53	200.93	204.74	200.81	184.23	216.17	217.98	203.97	126.50
5	153.19	196.57	199.81	203.43	198.86	194.27	213.56	222.00	196.89	173.35
6	142.22	197.25	200.58	204.26	203.23	203.72	217.61	221.35	201.06	179.75
7	138.63	195.39	199.26	203.51	204.72	203.73	217.66	220.39	211.20	171.80
8	140.75	195.60	199.48	203.73	206.05	205.91	218.21	221.12	226.64	223.30
9	136.47	194.84	197.77	201.01	206.23	209.61	214.58	223.35	210.86	215.72
10	140.36	192.52	196.52	200.83	208.05	205.10	217.55	223.33	220.90	181.85
11	142.13	192.69	196.83	201.28	205.79	209.25	214.62	221.97	219.81	199.01
12	150.19	192.11	196.21	200.61	207.13	210.91	214.82	219.83	227.47	178.09
13	151.03	190.91	194.24	197.80	205.37	209.30	214.57	223.47	225.11	182.50
14	155.99	189.91	194.11	198.63	204.80	208.90	214.44	221.35	227.14	206.56
15	163.42	189.16	193.08	197.34	205.32	209.08	212.59	221.72	224.25	195.10
16	162.63	187.01	192.70	198.82	203.60	209.62	214.48	220.18	231.04	197.26
17	166.11	187.13	191.41	196.11	203.64	207.47	213.09	220.42	223.46	214.51
18	170.50	186.60	191.14	196.12	202.57	207.55	211.91	220.47	227.82	207.04
19	171.52	185.02	190.11	195.61	201.72	206.71	211.73	219.95	230.22	200.66
20	173.14	183.69	188.38	193.48	201.59	206.11	212.67	220.59	229.24	177.79
21	172.31	182.42	187.37	192.76	200.45	205.10	211.54	219.41	226.14	192.20
22	173.46	181.95	187.30	193.10	199.39	204.84	211.39	220.62	225.25	186.50
23	172.46	181.40	186.55	192.13	198.47	204.51	211.57	217.91	222.64	219.00
24	170.95	180.83	186.06	191.72	198.25	204.97	211.28	218.43	225.17	206.44
25	171.91	178.45	185.07	192.15	197.55	203.26	210.46	218.54	224.12	172.70
26	172.39	178.63	184.67	191.13	195.36	202.23	210.82	218.06	223.27	203.81
27	171.02	176.70	183.76	191.26	196.72	203.20	210.59	217.93	224.00	200.20
28	169.09	176.84	182.86	189.33	196.32	203.25	210.10	218.56	224.85	195.17
29	170.05	177.57	182.75	188.32	196.23	202.26	209.62	216.57	229.88	221.37
30	170.41	174.76	182.12	189.92	196.60	202.19	208.22	218.16	223.92	180.04
31	171.46	177.19	0.00	188.42	196.63	200.96	211.16	217.95	221.06	224.17
32	169.37	175.19	0.00	189.65	195.99	201.49	209.40	215.37	226.02	203.89
33	169.08	175.38	0.00	188.83	196.59	201.27	208.56	218.16	222.78	220.20
34	158.88	173.61	0.00	187.61	195.26	202.33	206.86	216.05	224.37	207.82
35	150.10	0.00	0.00	188.44	195.50	199.26	205.71	215.55	227.75	209.97
36	124.75	186.24	0.00	183.83	201.28	200.69	207.50	215.06	225.26	207.29
37	109.81	180.90	0.00	195.93	218.02	200.36	209.03	215.61	221.26	222.52
38	0.00	178.42	0.00	203.85	217.15	197.62	0.00	221.83	225.74	210.20
39	0.00	200.64	0.00	168.15	249.87	206.56	187.26	207.97	316.00	223.26
40	0.00	175.32	0.00	0.00	0.00	206.32	0.00	0.00	0.00	272.35
41	0.00	0.00	0.00	0.00	0.00	202.11	0.00	0.00	245.09	199.20
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	204.20	274.50	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	279.24	188.53	227.63	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

BASELINE INLET, STATION 6

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	183.83	180.17	179.04	190.37	196.07	196.18	157.59
3	142.73	186.80	190.10	184.58	174.34	179.91	195.12	201.65	155.33	174.44
4	144.35	186.08	189.93	187.64	179.82	187.34	195.60	204.45	203.74	176.19
5	148.69	185.31	189.74	189.03	186.58	191.23	201.18	210.10	218.55	178.13
6	153.79	185.52	188.46	187.74	184.56	192.35	202.34	209.24	211.31	180.01
7	149.16	182.49	187.24	189.52	188.63	197.45	202.91	212.60	222.21	187.25
8	151.05	184.20	187.54	190.14	188.16	195.22	204.67	213.31	232.54	164.15
9	156.69	181.87	187.05	189.00	191.27	200.97	205.69	212.21	241.48	197.10
10	155.44	181.66	186.93	189.20	194.50	196.94	203.74	213.03	234.98	192.79
11	157.96	180.92	186.16	188.26	188.91	200.49	206.07	214.71	245.26	176.47
12	162.90	179.21	184.23	189.04	193.37	200.74	206.43	213.13	231.13	191.84
13	165.10	179.79	185.14	188.77	191.29	202.04	207.33	215.27	222.36	185.03
14	164.48	178.45	183.58	188.79	192.19	201.12	207.27	215.53	234.56	185.35
15	166.86	176.11	183.23	187.74	192.04	202.42	207.60	214.86	229.61	200.86
16	166.26	177.82	182.51	186.55	192.93	199.82	205.66	216.34	236.47	181.69
17	165.59	176.85	183.73	185.72	191.42	200.99	206.70	216.24	219.81	186.14
18	168.50	176.94	181.65	187.98	191.12	200.80	206.44	215.03	230.62	186.72
19	167.86	175.69	181.18	186.85	190.71	200.14	205.21	214.66	230.27	198.88
20	168.21	174.30	180.52	186.25	192.29	199.25	204.86	213.63	236.51	194.21
21	168.73	173.64	179.55	185.51	191.15	200.01	204.72	216.43	228.70	191.81
22	168.23	174.60	179.49	184.90	190.92	199.64	204.40	213.98	226.12	205.01
23	166.97	173.81	180.38	184.25	189.40	198.07	205.06	214.70	251.23	196.96
24	168.63	172.91	178.91	183.45	190.18	198.79	204.56	213.92	234.56	193.90
25	168.62	173.71	178.71	185.46	189.91	198.45	205.10	213.58	230.63	204.58
26	167.13	172.68	178.55	183.19	189.57	199.42	204.66	214.19	237.88	206.37
27	170.47	176.06	180.14	184.29	190.74	199.05	203.13	213.59	235.77	199.76
28	166.69	171.69	177.69	183.39	189.71	198.50	203.88	213.62	218.30	207.42
29	167.10	168.31	179.17	184.52	189.49	197.65	203.00	212.36	238.23	204.02
30	167.14	173.95	177.04	184.25	189.00	197.30	203.80	212.94	229.25	204.18
31	166.02	167.29	174.79	184.81	189.79	198.09	204.09	212.98	225.49	206.16
32	164.28	168.94	176.69	184.46	188.34	197.27	203.70	212.36	235.00	209.54
33	176.47	167.97	174.61	181.73	188.76	197.46	204.27	210.54	225.99	210.48
34	165.22	162.48	176.26	181.87	188.19	197.65	203.35	213.20	223.81	198.38
35	175.84	169.98	180.43	184.19	187.49	196.64	202.61	211.83	225.42	211.27
36	193.55	179.09	177.87	179.89	189.10	195.64	201.24	210.74	244.20	203.63
37	163.47	213.57	171.61	175.22	183.81	184.82	198.95	207.41	229.37	203.03
38	191.04	0.00	157.95	175.33	172.10	231.40	187.54	194.59	234.22	195.78
39	265.49	0.00	166.85	164.66	173.76	107.64	176.67	187.73	225.28	193.53
40	0.00	0.00	0.00	0.00	183.96	0.00	182.04	176.01	221.44	179.81
41	0.00	166.81	0.00	164.56	0.00	170.39	175.23	180.55	243.10	180.78
42	0.00	229.26	208.13	171.69	164.88	143.43	183.91	202.92	295.76	267.79
43	0.00	199.09	204.38	166.75	177.13	204.74	187.72	192.83	278.96	280.92
44	153.75	275.55	207.34	172.49	156.74	196.13	103.49	145.63	285.93	277.28
45	0.00	0.00	0.00	0.00	0.00	120.99	93.90	124.23	267.12	236.97
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A2.—Continued.

BASELINE INLET, STATION 7

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	151.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	75.10	153.46	181.43	175.60	166.03	164.83	160.88	175.84	170.36	0.00
4	341.67	153.09	181.06	177.18	165.61	167.88	170.31	184.37	170.67	153.26
5	326.68	166.95	180.18	179.81	172.96	168.47	181.00	191.78	190.89	151.56
6	89.15	160.14	181.75	183.00	175.50	172.51	185.20	189.72	191.44	162.12
7	339.01	159.97	182.32	179.28	176.89	178.97	188.93	193.57	191.10	166.90
8	325.52	162.71	180.27	184.32	180.05	178.57	190.76	198.25	195.66	173.18
9	327.66	170.86	180.43	184.55	179.94	186.77	193.06	202.03	202.41	189.94
10	84.49	172.04	182.37	183.23	180.34	186.18	194.16	204.12	204.00	189.94
11	90.98	173.04	180.79	183.94	184.79	189.13	193.87	206.09	205.15	185.01
12	105.43	172.63	181.86	183.34	186.23	189.77	200.09	205.81	208.04	170.72
13	119.31	173.00	180.93	184.39	185.65	190.05	197.20	211.67	209.32	183.35
14	325.31	173.61	181.54	184.09	186.42	193.39	197.20	209.75	210.71	190.86
15	98.83	172.59	179.75	185.29	188.04	193.97	201.31	210.75	213.65	197.27
16	110.89	174.26	180.33	186.18	188.56	192.97	201.47	209.13	214.91	184.71
17	93.65	172.27	180.18	184.61	189.28	194.85	203.15	210.57	212.58	190.47
18	90.64	171.70	180.09	185.04	188.29	195.44	201.70	210.03	214.34	202.47
19	124.14	172.34	179.49	184.88	190.21	196.50	204.25	211.70	216.06	192.11
20	161.19	151.71	181.24	184.57	189.03	196.30	201.96	211.50	216.36	200.91
21	169.81	172.18	178.97	184.82	190.74	196.91	203.73	211.99	217.41	202.80
22	169.86	172.23	177.72	183.22	189.73	196.49	203.69	213.60	214.84	201.08
23	169.25	171.62	179.10	184.89	190.22	196.68	203.63	211.08	218.45	193.35
24	167.75	170.10	178.48	184.44	190.92	196.29	202.54	212.30	216.61	199.66
25	168.08	170.44	177.69	183.71	190.86	195.57	203.70	212.83	216.83	200.74
26	169.41	171.78	177.47	183.11	190.17	196.23	203.55	212.46	217.27	202.24
27	168.16	170.52	179.29	183.36	191.11	196.03	203.54	212.04	218.66	197.10
28	169.19	171.57	178.96	183.52	190.31	196.33	204.40	211.44	217.10	203.75
29	107.29	170.33	177.43	182.72	190.48	196.81	202.98	212.57	217.09	205.95
30	106.64	170.46	178.13	183.47	189.50	196.93	202.59	212.89	217.54	206.86
31	314.92	169.31	178.10	183.24	190.41	196.32	203.74	212.23	216.90	204.76
32	102.55	170.22	176.76	184.20	189.63	197.24	203.75	212.37	216.74	204.70
33	122.24	168.79	177.63	183.64	190.20	196.32	204.45	211.28	216.84	203.20
34	100.42	168.26	177.48	183.71	189.62	196.06	203.01	212.43	216.06	204.64
35	94.02	169.10	177.18	183.67	189.89	196.02	203.24	212.73	214.56	207.85
36	313.40	169.57	177.60	182.40	190.00	197.39	203.33	210.67	214.79	204.03
37	95.01	169.15	177.10	182.01	189.87	196.82	203.78	211.15	214.89	207.54
38	97.72	167.39	177.96	183.31	189.87	196.98	203.12	211.19	214.85	204.59
39	311.66	168.97	173.97	183.65	190.21	195.54	203.25	212.42	214.28	209.62
40	312.51	163.40	175.23	181.63	188.50	196.01	202.61	210.13	215.17	206.91
41	314.20	153.21	169.24	177.72	184.22	194.16	200.12	204.87	207.26	205.86
42	244.66	135.17	160.06	164.76	173.29	183.95	187.84	194.94	196.08	192.73
43	255.24	117.83	149.11	161.68	166.07	179.17	186.07	187.96	175.72	186.14
44	185.92	93.36	160.01	140.18	155.64	176.07	183.59	184.23	194.16	177.01
45	212.62	87.44	0.00	172.89	144.68	141.18	134.06	155.24	194.58	172.34
46	244.70	83.64	197.15	0.00	106.91	138.92	107.48	123.21	141.45	150.13
47	337.68	114.28	0.00	136.41	133.24	110.82	110.00	139.26	131.51	144.86
48	333.06	117.93	170.21	145.74	137.69	116.64	111.89	131.63	147.07	135.53
49	0.00	0.00	0.00	0.00	143.05	142.01	116.38	139.12	151.52	139.29
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	146.12

BASELINE INLET, STATION 8

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	197.14	218.53	131.40	106.50	142.37	106.42	120.42	109.46	122.96	114.29
2	178.09	147.02	114.82	102.35	120.30	109.31	132.08	118.88	131.45	124.75
3	189.40	139.34	126.72	96.21	116.08	117.68	135.94	134.62	129.92	130.99
4	59.79	257.62	101.67	118.82	136.12	124.56	147.66	139.16	149.68	132.25
5	0.00	144.38	108.43	108.01	158.50	120.00	146.69	146.50	150.58	137.72
6	235.00	92.55	105.34	114.87	139.46	134.51	165.04	166.58	158.86	141.58
7	192.04	297.70	103.95	124.40	163.73	148.66	172.06	175.98	163.05	144.55
8	0.00	136.20	115.74	133.30	168.85	157.01	175.61	174.31	171.29	154.06
9	0.00	130.78	115.17	122.50	175.96	144.87	173.95	184.55	174.53	159.33
10	234.63	99.68	109.36	122.57	171.00	150.73	183.66	184.43	183.51	155.93
11	0.00	126.64	109.15	129.86	173.87	154.36	191.66	190.81	188.98	161.05
12	0.00	125.20	114.89	130.87	177.61	177.37	187.19	191.32	193.16	166.52
13	0.00	309.57	114.20	135.97	183.41	169.48	193.08	197.03	196.60	167.43
14	0.00	96.52	109.87	129.27	184.45	164.10	194.14	199.41	198.33	170.73
15	0.00	113.00	114.26	133.48	184.34	170.85	193.97	201.23	202.04	174.68
16	0.00	103.97	117.35	133.62	182.10	181.21	197.06	201.86	204.89	180.38
17	0.00	122.33	114.63	134.47	187.76	183.89	198.73	205.05	208.51	175.61
18	0.00	127.86	122.83	134.46	179.26	171.23	200.19	200.73	201.80	177.28
19	0.00	122.64	111.09	139.23	189.37	178.20	200.55	205.52	207.75	179.41
20	0.00	118.21	119.27	136.99	186.25	177.35	202.00	205.28	210.54	182.43
21	0.00	105.86	116.40	138.92	185.65	187.35	204.45	207.51	212.41	186.58
22	0.00	111.36	115.09	141.15	189.70	184.07	203.15	206.44	210.48	187.11
23	0.00	118.96	117.58	137.96	189.85	186.37	202.47	207.02	211.89	192.34
24	0.00	116.09	117.96	132.53	190.44	182.67	204.21	209.00	216.17	190.16
25	0.00	128.13	121.90	143.42	187.57	186.19	204.74	208.64	212.91	192.52
26	0.00	116.06	116.45	142.69	189.32	184.96	202.64	210.31	214.51	192.50
27	0.00	112.82	122.01	135.50	190.03	187.83	204.77	209.68	216.02	192.89
28	0.00	118.83	118.72	136.58	189.15	183.74	203.35	209.15	214.99	196.75
29	0.00	114.16	120.00	134.32	189.61	184.82	202.37	211.05	213.86	196.93
30	0.00	126.43	118.79	139.06	188.77	184.65	203.15	209.09	215.31	200.82
31	0.00	121.77	118.19	131.47	188.55	188.53	203.68	209.08	215.32	199.09
32	0.00	108.67	119.76	141.68	191.48	188.48	203.85	210.48	215.14	199.74
33	0.00	113.48	118.78	145.83	188.60	186.20	203.43	209.62	215.96	198.28
34	0.00	121.77	119.23	136.67	187.84	189.07	203.45	208.32	214.40	200.60
35	146.78	118.90	123.66	141.53	189.68	185.25	203.64	209.06	214.74	201.20
36	224.07	128.39	119.99	138.23	189.82	182.98	203.68	209.25	213.93	198.52
37	186.73	123.82	118.27	140.40	189.15	192.24	202.52	209.46	215.30	201.12
38	214.82	111.67	119.35	140.88	188.42	188.92	202.82	207.85	214.40	202.04
39	179.85	123.08	121.23	140.30	190.03	186.88	201.98	208.84	215.34	199.30
40	189.51	116.20	120.12	137.47	189.59	185.75	202.59	207.17	213.01	202.00
41	202.36	129.50	120.04	138.85	189.26	187.90	202.71	208.95	214.87	197.88
42	219.37	125.37	119.76	137.90	189.30	186.38	202.15	208.13	211.90	197.74
43	212.55	126.66	114.18	136.31	186.08	178.95	200.62	207.20	211.65	197.34
44	183.85	126.77	109.66	131.59	178.79	170.14	197.72	204.78	205.51	185.51
45	183.40	140.84	101.46	121.19	159.92	162.90	184.87	193.09	194.58	181.77
46	180.17	199.99	97.42	116.41	139.81	143.50	162.91	171.18	173.93	164.21
47	183.54	194.68	111.31	106.31	128.07	132.60	143.11	145.69	150.96	148.07
48	179.35	175.88	127.84	108.76	109.24	119.55	124.26	125.95	132.49	124.10
49	190.39	266.60	109.81	93.25	116.31	98.14	105.34	102.83	114.15	112.14
50	188.69	328.80	84.69	84.73	144.07	101.85	108.25	116.53	117.40	109.89

TABLE A2.—Continued.

ENHANCED INLET, STATION 1

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	198.63	206.71	215.87	227.41	236.01	246.15	255.55	260.33	267.86	270.86
2	198.31	208.04	214.71	225.84	236.33	245.98	254.91	261.87	267.99	273.22
3	198.38	206.17	215.87	226.12	235.32	245.48	254.74	260.49	265.61	275.92
4	197.46	207.88	215.94	225.75	237.13	243.99	255.10	260.69	266.73	272.85
5	195.20	207.16	217.31	225.36	234.92	244.94	253.76	260.22	266.77	272.05
6	201.59	205.53	215.90	226.94	235.74	245.01	253.91	260.09	267.31	274.22
7	198.26	205.41	216.34	225.17	235.03	244.20	255.52	261.38	267.74	273.39
8	198.91	207.35	215.80	226.15	235.33	244.53	254.04	260.15	266.25	272.62
9	197.81	207.47	214.24	226.37	235.45	243.79	254.35	260.40	267.73	271.22
10	198.79	206.13	215.81	225.71	234.78	245.06	253.98	259.90	266.91	272.56
11	194.74	206.69	215.49	225.54	235.44	243.66	252.95	260.16	265.96	275.64
12	199.34	205.38	216.49	224.64	233.73	244.74	252.82	260.25	266.90	273.31
13	194.41	206.81	215.33	225.86	233.79	244.55	251.86	260.37	266.92	272.49
14	200.57	205.30	214.73	225.20	233.85	243.51	253.07	260.42	267.49	270.13
15	196.01	204.46	214.51	225.24	234.40	243.61	251.87	261.69	267.30	269.58
16	199.72	204.68	213.77	225.51	234.66	245.06	253.59	260.41	266.41	270.90
17	197.67	205.48	213.69	224.83	233.72	242.52	253.76	259.64	266.83	272.69
18	198.57	206.87	215.46	224.26	233.03	243.62	254.14	260.66	266.36	272.44
19	200.77	205.59	215.73	226.21	234.36	243.22	253.71	260.06	266.17	274.77
20	198.69	205.97	213.11	226.58	235.77	242.44	253.67	259.97	265.69	272.49
21	196.59	204.68	214.43	224.97	234.45	244.12	254.30	260.44	267.30	272.53
22	196.71	206.17	215.05	225.15	234.49	245.99	254.06	259.95	267.40	274.74
23	199.22	206.03	214.17	225.90	233.82	243.65	253.30	261.18	266.62	272.74
24	198.74	204.61	214.83	226.43	234.47	243.80	255.67	259.95	266.28	272.58
25	197.88	206.23	215.97	225.14	234.14	244.22	254.27	260.82	267.60	273.94
26	197.25	205.98	214.63	226.58	235.01	243.93	253.68	259.90	267.60	273.78
27	196.22	205.99	215.43	227.35	233.73	244.35	253.62	260.30	265.95	270.44
28	198.79	205.37	214.50	227.06	234.32	244.76	254.06	261.65	268.40	272.04
29	198.51	204.43	216.71	226.81	234.74	244.74	254.87	262.05	268.23	271.39
30	195.80	207.35	215.93	226.94	235.70	245.38	254.05	260.37	267.25	274.91
31	195.64	204.77	216.44	225.99	235.61	244.98	253.32	260.44	267.90	273.04
32	201.15	205.36	214.99	225.90	235.19	245.70	254.30	260.43	266.90	272.71
33	197.95	206.89	215.62	226.26	234.73	244.90	254.23	260.78	266.86	274.67
34	199.91	205.77	217.28	226.98	235.32	242.76	255.31	261.21	268.31	273.48
35	198.06	206.24	215.55	226.23	234.97	244.20	253.58	262.18	269.02	275.05
36	199.64	205.49	216.84	227.92	235.84	244.68	252.62	261.78	267.96	275.29
37	198.98	207.14	215.86	226.28	235.50	245.95	256.34	259.74	267.94	274.31
38	199.38	206.14	216.98	226.97	233.71	244.98	256.03	261.78	267.96	273.70
39	198.14	207.10	217.29	225.89	235.33	245.29	254.69	260.96	267.88	274.92
40	197.79	204.54	217.62	227.08	235.95	245.77	254.91	261.42	268.77	274.77
41	199.21	205.82	216.15	226.18	235.90	244.34	254.58	261.73	268.58	276.52
42	199.52	205.04	216.82	226.95	235.95	244.81	255.13	262.61	268.92	273.79
43	201.09	208.76	218.00	227.20	235.69	244.56	254.50	261.87	268.54	276.72
44	199.29	206.13	215.55	226.58	235.39	245.86	256.92	262.16	267.95	276.36
45	200.19	207.57	217.20	226.07	236.01	245.60	254.88	262.72	267.63	271.92
46	200.26	207.39	216.62	226.22	237.18	246.14	254.43	262.87	268.80	275.36
47	198.15	207.78	217.32	227.40	235.70	245.08	253.89	262.12	268.00	275.42
48	200.97	207.01	218.27	226.12	236.18	246.14	255.36	261.96	268.62	272.49
49	197.09	206.80	215.19	228.17	236.56	245.69	256.40	262.41	267.77	272.93
50	192.42	201.93	213.69	226.30	234.95	244.95	256.27	261.00	267.68	262.16

ENHANCED INLET, STATION 2

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	212.65	199.13	190.17	191.88	191.21	201.79	213.05	216.15	221.62	234.95
2	224.25	211.43	198.64	203.01	199.73	205.50	211.54	209.98	213.06	227.62
3	234.57	223.82	213.56	226.12	223.46	228.53	233.70	222.45	45.05	223.87
4	236.65	234.78	222.80	238.99	250.10	250.84	251.33	246.94	36.08	165.43
5	238.44	239.25	227.89	250.19	259.66	263.24	266.36	274.66	259.20	218.80
6	238.57	244.68	235.85	255.63	270.52	274.45	277.72	284.49	285.13	280.24
7	237.29	244.84	239.73	262.04	275.06	282.48	289.02	294.11	291.86	302.73
8	236.37	245.57	241.34	263.23	276.24	283.40	289.65	298.83	305.39	303.20
9	234.83	247.00	242.82	266.63	281.23	286.93	291.68	302.63	308.41	306.05
10	232.27	244.60	239.79	265.87	283.40	289.48	294.53	304.96	306.41	314.33
11	246.58	244.89	243.17	265.69	282.03	290.30	297.45	306.00	311.36	315.63
12	234.12	244.62	249.44	265.46	281.81	288.82	294.77	304.92	313.00	313.64
13	229.07	241.23	249.82	264.75	279.32	288.47	296.52	305.71	311.36	308.25
14	233.17	239.87	247.32	265.36	278.43	286.14	292.80	303.31	310.84	312.06
15	225.44	237.62	247.01	264.03	275.40	284.04	291.63	300.81	307.93	309.31
16	223.52	235.66	246.31	260.61	272.84	281.20	288.56	300.56	306.14	306.96
17	220.05	232.70	245.95	259.64	270.85	279.73	287.60	296.51	303.35	300.03
18	220.17	232.14	244.27	258.21	269.03	278.11	286.20	294.85	300.70	300.79
19	218.73	230.24	245.64	257.64	269.23	276.73	283.28	293.13	298.99	298.74
20	216.61	228.36	239.28	255.67	265.94	274.38	281.86	289.42	295.14	290.92
21	214.64	226.24	239.55	253.24	264.08	272.39	279.79	288.30	292.27	288.05
22	215.40	223.93	238.57	251.00	261.92	270.62	278.41	286.43	291.53	287.97
23	212.14	222.05	236.88	249.98	259.61	267.96	275.44	282.45	285.93	286.25
24	210.06	220.06	234.97	248.72	257.37	265.73	273.28	279.95	285.82	283.12
25	210.85	219.72	233.31	246.46	255.42	263.90	271.57	278.14	283.42	281.32
26	208.60	218.18	230.68	244.70	252.95	261.82	269.90	276.42	279.69	276.92
27	206.00	216.40	231.40	243.09	251.41	260.12	268.09	274.93	275.94	279.25
28	206.38	214.05	225.63	243.38	248.60	257.90	266.46	272.80	272.69	271.92
29	205.39	213.81	227.16	238.08	247.76	256.41	264.35	269.62	269.69	272.06
30	204.08	212.63	226.10	238.45	246.13	254.12	261.39	268.11	269.88	268.59
31	203.17	210.66	225.88	236.83	244.18	252.64	260.44	266.45	267.52	267.68
32	199.61	208.43	210.88	232.62	241.20	250.10	258.40	263.79	264.55	266.55
33	201.55	209.51	221.20	232.99	241.25	250.20	258.55	262.42	264.13	260.39
34	199.54	207.00	220.78	230.16	239.19	247.72	255.68	260.99	261.74	261.53
35	198.53	203.78	219.22	228.90	236.02	244.64	252.74	258.49	261.53	258.83
36	196.21	202.66	215.03	226.84	234.86	243.55	251.75	255.53	258.38	257.35
37	197.61	200.84	215.07	227.33	234.27	242.94	251.11	254.54	258.68	254.53
38	194.77	201.58	213.59	225.96	230.69	239.54	247.96	253.40	255.81	257.86
39	194.04	197.94	212.03	223.38	228.93	236.88	244.42	250.99	252.53	254.75
40	193.45	197.51	212.65	218.62	228.72	236.57	244.02	248.89	252.64	252.07
41	192.50	196.19	206.99	216.15	226.37	233.95	241.16	249.12	249.85	248.03
42	191.45	194.29	204.96	214.40	222.75	231.86	240.65	246.33	248.84	251.21
43	190.21	193.97	204.29	213.24	219.59	228.05	236.26	243.19	245.86	249.50
44	190.26	190.98	201.40	211.68	217.57	226.58	235.36	241.35	244.09	245.04
45	189.27	189.36	200.19	207.85	215.02	224.53	233.88	237.82	241.46	244.20
46	187.44	187.56	197.85	205.67	212.09	222.15	232.10	237.33	240.22	238.91
47	186.51	185.25	192.45	204.07	210.58	219.44	228.31	234.95	237.97	246.35
48	185.74	183.44	190.66	199.73	207.22	216.71	226.19	231.79	234.22	236.69
49	189.04	182.65	188.83	197.96	201.82	212.11	222.50	228.15	230.49	236.54
50	196.76	187.36	186.54	193.88	198.22	207.73	217.47	223.11	228.10	237.81

TABLE A2.—Continued.

ENHANCED INLET, STATION 3

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	189.65
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	251.40
3	0.00	11.66	0.00	0.00	0.00	256.35	207.49	0.00	0.00	0.00
4	0.00	0.00	0.00	414.22	217.26	450.64	472.07	105.07	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	262.83	132.93	272.98
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	278.85
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	198.57	175.44	264.60	0.00	0.00	0.00
9	213.42	244.70	96.18	234.54	192.31	217.30	288.67	230.97	61.89	0.00
10	215.98	257.44	218.48	231.85	258.52	267.17	300.35	290.43	98.27	168.87
11	213.99	253.04	240.19	246.29	277.43	288.98	297.51	300.77	193.50	255.64
12	215.51	250.87	258.86	256.97	278.06	288.13	296.36	298.67	274.32	332.49
13	203.02	247.68	259.12	259.83	281.02	283.84	291.90	296.39	293.40	227.91
14	206.28	242.23	260.93	263.49	280.61	282.79	287.57	293.16	294.96	189.15
15	212.84	240.10	258.02	264.68	277.19	279.00	283.88	289.24	296.53	271.58
16	208.42	236.83	255.84	263.78	272.80	276.37	282.46	285.64	294.38	267.19
17	204.96	236.83	255.27	262.39	270.00	271.60	278.61	284.61	291.81	262.87
18	194.07	232.29	250.80	259.82	268.35	270.34	276.52	282.33	287.69	269.66
19	201.64	229.81	250.87	258.09	268.02	265.92	272.86	279.33	284.61	269.62
20	190.05	227.54	247.48	257.58	265.92	264.03	269.12	273.99	283.39	194.25
21	197.95	224.52	243.34	256.28	260.58	262.11	267.16	271.56	280.06	235.01
22	195.38	226.46	243.20	251.97	259.01	260.27	263.56	267.10	276.04	249.61
23	190.99	224.40	238.01	251.45	258.43	256.27	262.07	268.31	274.74	195.68
24	190.31	216.09	237.12	249.90	255.36	254.53	260.09	263.62	272.78	196.70
25	193.51	219.33	233.12	246.21	250.06	253.27	257.77	260.07	268.47	279.90
26	197.57	218.80	230.91	243.36	249.64	248.87	256.40	257.76	266.94	237.26
27	191.03	214.63	226.19	241.73	247.39	247.95	253.83	255.99	262.33	224.08
28	189.01	214.54	221.93	241.96	244.35	246.16	251.94	255.57	262.96	212.34
29	194.20	211.33	225.86	237.30	243.54	243.70	249.53	251.90	260.91	267.18
30	189.76	207.95	222.38	234.06	240.45	241.67	247.84	251.98	258.77	266.86
31	188.97	207.85	219.34	233.58	237.39	240.74	244.79	248.74	259.07	296.09
32	185.27	209.49	216.55	233.59	236.63	237.43	242.77	247.24	255.64	204.37
33	187.10	204.83	214.13	227.48	234.25	235.11	240.75	243.90	253.77	186.91
34	180.92	205.52	212.13	224.87	231.79	232.97	240.34	243.13	252.85	268.37
35	180.32	204.29	209.55	226.04	229.07	230.45	237.42	241.91	249.55	119.09
36	183.14	197.99	209.34	222.53	225.56	229.07	234.83	240.27	248.83	260.65
37	180.89	195.33	203.95	219.47	223.27	227.04	232.68	239.88	247.45	199.11
38	179.29	192.90	205.03	216.97	221.10	222.71	230.54	236.40	245.73	237.11
39	177.65	191.54	198.27	213.48	218.47	219.69	228.40	234.18	242.48	254.64
40	177.19	188.76	196.79	210.23	215.67	218.42	224.20	231.09	239.03	161.76
41	173.73	187.10	191.66	208.45	210.39	214.00	222.72	227.75	238.47	209.86
42	172.25	182.66	187.27	203.57	207.30	210.26	219.47	225.24	235.77	227.29
43	175.67	178.11	186.69	202.80	204.59	207.61	215.68	220.28	231.81	205.13
44	167.31	171.62	176.60	194.42	198.76	201.50	210.68	216.76	227.91	194.89
45	163.41	161.06	175.57	194.61	194.04	196.26	206.85	212.01	224.76	232.56
46	165.97	0.00	170.17	192.56	187.74	191.13	200.43	207.95	217.19	268.42
47	220.88	0.00	158.23	187.89	181.74	184.92	194.33	203.67	212.96	198.87
48	0.00	0.00	171.88	186.75	176.97	178.36	189.93	195.08	209.11	211.69
49	0.00	0.00	0.00	0.00	183.52	178.60	186.77	192.16	200.94	238.25
50	0.00	0.00	0.00	0.00	0.00	176.27	192.59	194.86	204.82	253.63

ENHANCED INLET, STATION 4

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	0.00	0.00	0.00	0.00	0.00	208.72	238.99	212.40	103.14	0.00
2	0.00	0.00	0.00	145.77	222.02	240.80	245.05	242.86	136.74	197.84
3	0.00	0.00	0.00	108.59	0.00	244.80	251.88	250.34	177.71	0.00
4	0.00	292.99	191.08	0.00	215.32	244.72	250.06	253.27	189.21	0.00
5	0.00	263.05	192.96	201.65	224.84	245.79	250.58	253.36	214.17	201.35
6	0.00	246.31	0.00	187.01	228.59	241.32	245.19	242.26	206.99	247.01
7	154.70	240.12	216.49	204.86	231.80	243.13	246.23	251.76	243.85	224.21
8	0.00	244.27	207.91	215.26	230.87	239.69	244.28	250.55	237.64	231.49
9	159.75	250.86	210.50	215.30	227.57	237.76	242.99	249.73	235.58	234.95
10	0.00	247.68	210.39	210.79	228.73	236.83	241.88	246.51	249.77	243.67
11	208.22	179.91	211.61	215.60	229.23	233.15	239.03	246.85	245.65	234.19
12	160.37	175.04	207.20	215.65	225.79	232.20	237.15	243.34	244.51	224.55
13	148.82	174.27	208.46	215.11	225.63	231.89	236.66	241.53	243.59	227.67
14	116.55	178.16	204.18	212.63	223.33	228.73	234.92	241.62	244.78	234.06
15	164.87	178.49	202.04	211.73	222.16	226.63	232.72	238.84	243.56	225.08
16	223.46	172.90	197.46	209.56	218.49	223.54	230.43	236.32	242.57	230.78
17	144.65	170.11	196.00	206.06	218.31	223.38	229.14	235.87	241.66	227.84
18	153.30	173.57	194.50	206.34	214.80	220.57	226.82	232.75	237.19	224.85
19	148.89	182.04	191.49	202.62	214.24	218.08	223.72	231.27	235.33	212.49
20	150.56	174.97	189.03	199.94	210.73	217.76	223.07	227.95	231.53	212.89
21	137.68	165.02	187.30	198.95	208.82	215.07	221.94	227.42	232.38	226.45
22	167.82	178.67	185.42	198.38	206.79	212.09	219.32	224.15	230.58	230.03
23	165.21	163.45	183.13	195.99	204.26	210.67	217.11	223.70	228.14	212.48
24	162.31	164.93	180.70	194.21	201.63	209.61	216.21	221.24	226.39	205.29
25	146.57	169.92	180.48	191.98	200.76	207.25	215.71	220.33	223.18	205.56
26	152.60	158.89	178.36	190.42	200.99	206.50	213.18	218.94	222.17	200.17
27	153.75	163.08	177.30	191.10	197.58	205.71	212.37	219.71	222.99	191.66
28	144.75	162.43	175.19	189.47	198.74	204.75	211.11	216.27	221.47	208.86
29	175.99	143.13	174.91	187.65	196.50	203.61	213.49	217.03	222.16	220.61
30	148.52	148.53	173.91	186.21	194.99	203.06	212.10	216.47	221.43	239.73
31	0.00	149.22	172.78	185.87	195.20	202.07	210.86	217.77	220.99	171.76
32	148.84	143.43	172.17	179.22	194.63	202.71	211.45	216.20	223.23	206.08
33	0.00	138.01	171.09	181.81	195.12	200.85	212.91	216.28	221.65	219.76
34	0.00	162.11	165.82	0.00	193.49	201.07	211.94	217.31	223.01	194.55
35	172.93	172.87	156.89	0.00	193.91	200.88	211.80	217.35	222.87	206.98
36	180.87	176.34	0.00	0.00	193.30	0.00	212.08	217.92	224.11	208.52
37	205.89	173.92	0.00	0.00	0.00	0.00	210.36	216.40	223.31	205.87
38	186.29	195.42	0.00	0.00	0.00	0.00	0.00	220.81	224.00	197.29
39	202.70	162.49	0.00	0.00	0.00	0.00	0.00	216.58	224.02	216.63
40	0.00	135.35	0.00	0.00	0.00	0.00	0.00	220.75	223.10	229.19
41	0.00	154.41	0.00	0.00	0.00	0.00	0.00	239.18	226.04	0.00
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	217.91	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A2.—Continued.

ENHANCED INLET, STATION 5

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	0.00	0.00	0.00	0.00	0.00	0.00	208.73	208.15	174.69	240.83
2	0.00	0.00	0.00	0.00	145.07	201.50	211.45	214.97	172.18	234.21
3	0.00	0.00	0.00	158.39	157.51	206.14	219.37	220.77	171.62	223.02
4	191.59	0.00	162.00	178.17	175.67	215.07	218.89	224.61	196.38	225.03
5	155.30	0.00	184.05	183.59	180.00	213.93	222.97	223.30	208.26	235.26
6	133.34	0.00	190.91	190.32	179.02	215.36	223.82	227.34	206.33	233.88
7	110.02	0.00	192.17	191.56	197.09	214.88	223.25	226.16	212.44	238.15
8	130.01	0.00	197.38	193.12	195.85	215.97	221.08	225.20	215.01	245.04
9	206.96	0.00	192.72	198.06	204.41	217.20	221.84	224.96	217.32	253.01
10	0.00	0.00	196.51	200.68	202.58	215.66	222.36	229.94	223.88	233.49
11	135.27	186.77	199.39	198.86	201.60	215.47	222.26	227.55	224.70	253.57
12	102.54	0.00	196.16	200.27	203.51	214.68	221.30	226.98	225.60	230.66
13	206.20	202.05	194.94	200.44	204.17	213.32	220.93	228.58	226.03	235.54
14	129.94	184.13	195.12	198.63	202.92	213.24	218.83	225.21	226.75	240.58
15	117.23	189.08	193.59	199.64	201.20	212.75	218.01	227.04	225.88	229.22
16	130.08	179.65	192.10	199.23	201.44	212.05	218.49	226.27	228.63	239.98
17	180.51	176.23	189.92	197.68	201.18	210.64	218.18	225.88	226.60	232.73
18	163.99	183.33	191.51	196.81	202.15	210.75	217.35	222.33	226.47	233.75
19	152.27	189.16	189.61	196.89	199.92	209.37	215.98	224.10	227.54	233.58
20	165.47	181.85	188.37	196.12	199.54	209.76	216.29	223.86	226.97	240.88
21	160.20	187.87	188.14	195.29	200.12	208.66	216.56	222.26	225.81	228.61
22	171.52	178.02	186.62	194.85	200.66	208.62	214.59	222.43	228.91	243.30
23	171.92	177.91	187.38	194.01	199.49	208.69	214.23	221.95	227.02	242.91
24	161.57	175.19	186.73	194.73	197.21	207.50	214.39	222.30	226.32	234.13
25	164.76	177.33	185.68	193.90	196.89	207.73	213.56	219.78	225.57	232.57
26	176.40	176.93	186.01	193.64	196.51	207.27	213.12	221.10	226.61	236.52
27	158.53	175.53	185.69	193.18	197.28	207.46	213.18	220.66	224.09	228.19
28	182.36	181.82	184.01	192.23	196.31	207.06	211.95	219.40	223.27	253.57
29	139.30	172.93	184.30	192.61	196.18	207.20	212.35	219.52	222.72	241.53
30	147.25	170.57	182.84	193.39	195.32	206.41	212.23	218.59	223.32	237.34
31	167.81	171.90	183.16	191.72	196.19	205.20	211.11	218.63	222.99	240.24
32	171.34	168.33	182.08	192.03	196.08	205.21	210.68	218.13	222.74	235.49
33	205.08	171.85	182.62	191.70	195.33	205.81	210.63	219.48	223.39	245.64
34	183.91	171.63	181.48	189.25	193.22	204.64	210.04	217.96	223.27	247.04
35	158.09	169.39	181.25	200.15	192.25	203.84	210.35	217.59	223.55	238.52
36	125.76	177.18	180.50	0.00	192.96	204.15	210.28	216.46	223.11	246.59
37	180.96	168.75	181.22	0.00	191.87	210.22	210.15	217.62	220.87	230.84
38	210.28	0.00	179.97	0.00	193.47	0.00	209.51	217.67	223.70	246.75
39	222.17	226.91	238.05	0.00	206.82	0.00	202.96	218.72	210.36	251.62
40	199.42	233.91	221.17	0.00	153.43	0.00	210.28	214.51	209.72	234.84
41	0.00	0.00	0.00	0.00	0.00	0.00	208.30	217.70	223.62	218.01
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	191.01	234.58
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	212.06	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENHANCED INLET, STATION 6

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	0.00	0.00	0.00	110.39	145.15	162.63	178.73	194.96	174.74	
3	201.26	0.00	166.17	124.51	161.96	183.67	193.52	203.75	183.35	
4	135.81	175.14	181.05	154.16	167.65	184.62	199.24	203.94	193.88	
5	159.96	174.91	181.57	161.86	174.04	201.19	205.93	209.85	200.06	
6	125.33	171.06	175.75	170.69	183.27	197.98	209.39	211.89	203.14	
7	124.41	173.23	182.49	184.31	187.43	203.81	209.75	214.72	205.64	
8	137.88	170.69	183.80	183.91	186.67	202.42	211.41	216.10	208.24	
9	221.13	174.68	181.35	186.68	196.01	204.53	210.60	215.78	211.20	
10	142.75	177.14	183.75	186.62	194.47	203.62	212.40	215.69	212.13	
11	163.11	175.92	181.78	185.97	198.08	205.72	212.20	215.97	218.38	
12	180.75	179.99	183.53	190.76	197.89	206.47	211.67	217.03	214.34	
13	150.14	175.92	184.55	189.78	197.89	205.17	212.66	216.50	218.21	
14	213.62	177.67	182.19	191.67	197.96	203.92	212.00	216.76	217.55	
15	149.65	178.45	183.57	192.16	197.64	204.04	211.15	216.91	218.20	
16	197.54	177.21	183.25	191.50	196.53	204.03	211.02	215.97	218.23	
17	176.47	179.66	182.09	190.62	197.47	202.34	210.82	216.79	219.97	
18	180.04	176.58	182.47	190.16	197.38	201.57	211.16	216.27	220.05	
19	193.34	176.47	181.45	190.67	197.37	203.12	210.52	215.68	220.26	
20	201.24	177.45	181.61	190.63	197.82	202.30	210.89	214.59	220.45	
21	155.75	174.18	179.66	190.83	197.03	202.95	210.17	216.36	218.74	
22	180.58	174.10	178.10	189.94	195.85	201.12	210.24	215.98	220.13	
23	178.64	175.29	179.25	189.39	195.27	201.36	209.78	215.07	219.79	
24	205.25	173.30	179.34	189.00	195.23	200.31	209.62	215.34	219.11	
25	185.75	174.03	179.75	188.27	195.51	200.37	209.02	215.10	218.81	
26	175.33	173.33	178.41	186.77	194.94	200.19	209.53	215.30	217.89	
27	181.38	172.63	176.99	187.03	194.68	200.13	208.26	214.90	220.02	
28	168.67	170.99	176.77	186.95	194.88	199.36	207.97	214.95	220.59	
29	167.82	169.25	175.87	185.30	193.34	199.67	207.30	214.31	217.46	
30	160.62	167.37	175.52	185.44	193.91	200.18	208.02	213.08	216.26	
31	183.97	169.23	175.91	185.95	193.43	198.82	207.33	214.05	218.06	
32	201.63	169.44	175.75	184.91	192.73	199.04	207.71	213.35	218.92	
33	0.00	168.54	175.04	184.58	192.27	199.04	206.73	213.49	217.76	
34	222.21	189.49	175.08	183.74	192.36	198.29	206.71	212.91	218.93	
35	214.24	216.43	175.28	185.51	192.86	198.62	206.19	212.66	215.53	
36	205.14	175.09	174.99	183.34	193.32	198.37	206.37	212.42	215.92	
37	183.38	169.61	173.00	181.65	191.33	198.42	206.48	212.89	215.65	
38	0.00	165.72	174.12	182.06	190.45	198.88	205.93	211.49	214.31	
39	228.34	166.06	173.49	179.76	191.05	196.95	200.90	210.40	217.28	
40	231.38	154.56	170.89	175.68	177.73	179.57	180.07	202.52	213.38	
41	0.00	107.95	164.50	19.27	141.63	93.79	172.61	187.23	202.67	
42	0.00	108.20	0.00	79.06	207.41	85.17	222.40	280.96	176.46	
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

TABLE A2.—Concluded.

ENHANCED INLET, STATION 7

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	281.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	207.44	76.37	0.00	118.09	133.85	147.13	163.80	154.36	0.00
4	0.00	299.26	150.51	124.65	110.15	149.03	158.07	175.20	157.29	0.00
5	0.00	276.02	169.87	138.54	102.04	147.11	165.69	177.66	167.00	0.00
6	0.00	312.32	340.78	267.42	132.58	164.48	176.25	187.23	164.78	0.00
7	0.00	302.05	0.00	246.89	142.03	179.91	188.83	200.10	176.84	0.00
8	0.00	292.26	0.00	249.19	143.25	184.43	192.94	194.90	185.30	0.00
9	0.00	308.93	176.46	162.16	151.10	184.77	192.32	200.96	186.09	0.00
10	0.00	167.58	178.51	163.37	156.52	189.41	197.90	203.30	190.31	0.00
11	0.00	210.40	148.30	162.53	177.87	194.07	202.60	207.70	197.89	225.16
12	0.00	0.00	176.99	175.50	175.03	195.21	202.24	208.17	198.12	0.00
13	0.00	0.00	165.44	175.57	185.43	196.35	205.48	210.66	198.67	0.00
14	0.00	0.00	185.50	186.50	187.99	197.68	204.87	208.73	202.61	0.00
15	0.00	0.00	174.85	180.26	185.55	196.52	205.77	212.99	202.42	0.00
16	0.00	180.45	178.58	185.05	191.22	199.59	206.34	212.79	208.27	0.00
17	0.00	0.00	177.56	183.55	189.30	199.61	207.14	213.06	209.17	0.00
18	146.29	0.00	161.75	175.00	188.26	200.07	206.73	212.45	213.54	235.22
19	0.00	276.78	174.49	182.89	190.98	200.76	206.89	213.39	212.68	0.00
20	0.00	277.58	175.92	181.39	186.81	200.59	207.10	212.99	211.05	215.59
21	0.00	167.93	177.44	185.17	192.58	200.86	207.51	214.57	209.56	208.16
22	0.00	0.00	177.57	185.11	192.38	200.72	207.03	212.83	213.12	222.11
23	0.00	0.00	177.94	184.33	190.57	200.92	208.24	213.96	213.87	195.26
24	0.00	327.22	177.55	183.45	189.29	200.20	207.59	214.89	214.97	0.00
25	0.00	0.00	175.79	183.99	191.88	201.43	207.83	214.55	216.65	0.00
26	0.00	0.00	178.07	183.74	189.30	200.15	207.33	215.09	213.11	238.10
27	0.00	166.16	173.88	182.43	190.70	200.38	206.84	214.18	212.75	0.00
28	0.00	167.15	174.59	182.66	190.48	200.33	207.62	215.43	212.90	0.00
29	0.00	326.81	176.77	182.56	188.25	200.47	206.91	215.17	212.39	0.00
30	0.00	0.00	178.29	184.23	190.05	200.07	206.57	215.23	213.06	218.44
31	0.00	169.77	174.84	182.48	189.91	199.88	207.16	213.81	214.04	0.00
32	0.00	163.76	177.79	184.05	190.19	200.18	207.34	213.84	213.30	220.63
33	0.00	168.97	176.19	183.41	190.43	199.76	206.67	214.12	215.38	0.00
34	0.00	158.91	177.40	183.58	189.63	198.95	207.15	213.76	215.11	0.00
35	0.00	0.00	173.14	181.11	188.90	199.13	205.94	212.90	212.10	246.84
36	264.52	0.00	173.67	181.23	188.61	199.86	206.47	213.03	212.23	0.00
37	176.13	175.78	171.88	180.91	189.70	199.28	206.19	213.65	212.74	0.00
38	0.00	0.00	174.03	181.43	188.67	199.27	205.24	212.29	212.41	186.46
39	0.00	172.41	174.51	182.13	189.57	199.52	204.76	212.33	211.05	0.00
40	0.00	182.56	172.32	179.80	187.19	198.90	205.10	212.04	213.81	0.00
41	0.00	274.64	173.15	180.57	187.91	198.53	204.29	212.18	213.08	220.36
42	179.09	155.44	172.11	181.09	189.82	198.76	202.86	209.66	212.22	229.28
43	0.00	247.37	163.13	174.90	186.49	197.58	198.13	197.35	209.60	226.53
44	0.00	237.00	414.86	368.75	320.80	189.35	182.88	179.47	203.76	289.86
45	184.16	247.93	414.67	426.86	435.38	149.46	163.85	160.28	185.78	258.71
46	186.06	0.00	0.00	0.00	440.45	444.38	158.81	169.40	172.28	256.03
47	187.65	314.26	0.00	0.00	0.00	0.00	69.88	117.17	112.23	246.95
48	184.84	284.44	0.00	0.00	0.00	98.89	94.94	101.84	111.98	281.83
49	0.00	0.00	0.00	0.00	0.00	114.78	103.27	121.66	124.03	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENHANCED INLET, STATION 8

CP	VR1	VR2	VR3	VR4	VR5	VR6	VR7	VR8	VR9	VR10-REL VELTOT
1	0.00	319.59	183.60	191.48	0.00	124.90	370.29	129.59	121.49	213.04
2	0.00	327.32	183.96	199.41	0.00	163.84	399.48	128.82	87.29	318.84
3	0.00	196.79	184.04	183.62	0.00	155.21	368.82	179.45	136.00	342.52
4	0.00	185.45	183.57	190.69	0.00	138.85	363.31	145.22	130.35	205.04
5	0.00	254.25	188.99	185.27	0.00	120.56	373.53	159.97	116.85	432.25
6	0.00	340.63	186.75	196.58	0.00	155.09	358.65	162.37	124.68	184.27
7	0.00	265.19	187.39	221.39	301.60	139.76	130.04	170.26	134.07	214.54
8	0.00	257.33	179.09	323.62	0.00	136.02	155.68	175.94	152.85	328.86
9	0.00	198.32	176.96	332.26	0.00	143.23	173.62	190.59	158.59	334.34
10	0.00	234.71	0.00	121.58	0.00	159.74	175.82	190.42	169.92	324.57
11	0.00	270.32	0.00	325.08	0.00	165.12	185.32	199.05	168.21	318.28
12	0.00	196.32	0.00	0.00	276.21	179.77	189.26	199.29	162.93	321.47
13	0.00	215.49	291.63	317.73	0.00	188.02	196.10	203.11	171.31	343.35
14	0.00	338.90	0.00	316.35	0.00	188.75	198.61	204.76	184.77	209.96
15	0.00	207.16	0.00	138.69	131.40	191.75	200.87	205.75	171.24	200.19
16	0.00	195.13	0.00	316.20	241.21	192.56	201.84	209.04	187.23	298.97
17	0.00	178.00	0.00	310.57	257.42	196.38	202.57	208.11	193.36	316.47
18	0.00	199.41	0.00	323.79	192.49	191.79	198.84	209.32	189.89	196.62
19	0.00	192.20	0.00	309.82	196.11	198.88	204.95	210.95	191.74	338.65
20	0.00	179.72	279.24	309.13	147.28	194.93	203.36	211.69	196.34	209.09
21	0.00	215.31	0.00	0.00	178.67	196.61	203.80	210.94	202.19	191.32
22	0.00	198.46	0.00	306.09	311.41	200.85	205.78	210.67	203.32	324.99
23	0.00	203.69	0.00	311.17	0.00	200.11	206.43	212.74	204.36	182.90
24	0.00	196.27	0.00	139.30	0.00	199.60	205.83	212.00	202.08	192.12
25	0.00	185.85	308.17	303.13	249.13	198.67	205.27	210.98	207.34	303.87
26	0.00	177.29	0.00	183.43	187.34	198.30	205.39	212.95	209.11	305.33
27	0.00	167.05	0.00	305.69	135.28	200.00	204.33	214.63	210.66	184.29
28	0.00	195.01	288.46	303.27	0.00	199.28	205.48	211.98	211.23	331.66
29	0.00	191.79	279.75	195.90	229.16	201.01	205.04	212.36	214.58	207.04
30	0.00	172.47	0.00	208.67	0.00	199.42	205.33	211.66	215.07	189.28
31	0.00	215.02	0.00	303.85	244.61	198.61	205.64	211.89	214.29	212.07
32	0.00	143.82	0.00	139.27	275.41	198.85	203.99	212.57	210.10	218.31
33	0.00	206.49	0.00	190.82	204.37	198.82	205.07	212.05	212.40	323.28
34	0.00	192.43	0.00	189.06	210.71	197.96	205.63	212.66	218.67	325.40
35	0.00	201.63	297.82	305.03	204.56	199.78	204.86	212.22	216.72	184.78
36	0.00	192.28	331.73	200.80	0.00	199.52	204.52	212.16	212.33	316.42
37	0.00	184.59	327.40	160.11	0.00	197.58	204.37	212.66	216.88	200.57
38	0.00	187.17	354.60	192.37	0.00	197.39	204.03	211.01	214.47	202.79
39	0.00	192.86	319.76	312.91	200.24	197.84	204.55	209.66	213.83	180.52
40	0.00	200.16	317.90	300.86	200.56	197.91	203.05	210.46	215.57	199.85
41	0.00	186.01	193.42	302.45	212.44	196.62	203.74	210.55	212.33	206.58
42	184.03	193.86	194.35	302.21	171.36	196.92	203.32	209.82	213.03	324.90
43	184.66	184.40	193.14	302.99	221.52	197.77	203.65	209.67	203.49	209.90
44	184.76	195.31	293.28	179.63	214.96	196.53	202.00	209.93	201.89	211.59
45	0.00	173.29	301.91	177.90	233.78	196.22	202.18	207.07	206.61	202.20
46	0.00	182.05	0.00	159.67	215.07	195.37	199.28	202.79	204.48	216.68
47	180.99	185.07	271.47	314.54	215.22	185.77	189.30	189.53	202.94	314.00
48	182.39	190.09	176.19	325.27	210.26	164.52	169.59	167.64	187.48	179.67
49	177.72	178.01	181.80	331.75	228.77	137.80	143.11	141.25	170.88	197.61
50	180.85	224.37	179.89	249.44	0.00	112.01	116.74	118.59	127.09	201.22

TABLE A3.—RELATIVE FLOW ANGLES

(degree)

BASELINE INLET, STATION 1

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	66.63	64.49	66.38	67.36	68.25	69.42	69.80	70.60	71.48	73.70
2	66.70	64.49	66.59	66.93	68.13	69.26	69.93	70.71	71.81	76.26
3	67.28	64.28	66.45	67.14	68.16	69.24	69.93	70.86	71.35	73.90
4	67.06	64.57	66.71	67.09	68.41	69.07	69.93	70.95	71.20	75.48
5	66.52	64.37	66.70	67.20	68.53	69.19	69.81	70.75	71.51	71.62
6	66.50	64.64	66.68	67.27	68.51	69.12	70.03	70.68	71.70	72.59
7	66.83	64.43	66.51	66.96	68.29	69.39	69.84	70.81	71.35	72.72
8	66.79	64.38	66.34	67.34	68.41	69.20	69.77	70.78	71.35	74.46
9	67.02	64.60	66.24	66.98	68.45	69.31	69.94	70.69	71.61	73.64
10	66.79	64.41	66.75	67.26	68.44	69.20	69.74	70.60	71.54	70.96
11	67.11	64.57	66.83	67.28	68.63	69.10	69.82	70.86	71.83	71.61
12	66.79	64.51	66.66	67.42	68.46	69.19	69.80	70.56	71.65	72.62
13	67.14	64.31	66.39	67.22	68.34	69.32	69.82	70.74	71.64	71.46
14	67.32	64.63	66.80	67.27	68.42	69.27	69.70	70.62	71.65	74.93
15	67.07	64.55	66.83	67.19	68.16	69.24	69.90	70.92	71.67	72.51
16	67.10	64.61	66.31	67.00	68.34	69.40	69.79	70.89	71.58	73.26
17	67.13	64.58	66.44	67.48	68.56	69.36	69.69	70.86	71.49	74.14
18	67.07	64.64	66.45	67.12	68.29	69.37	69.79	70.80	71.84	74.32
19	67.25	64.79	66.54	67.13	68.12	69.20	69.84	70.72	71.76	75.81
20	67.14	64.52	66.64	67.13	68.49	69.13	69.90	70.70	71.50	76.07
21	67.37	64.39	66.64	67.35	68.33	69.17	69.89	70.83	71.51	73.28
22	66.87	64.59	66.64	67.34	68.30	69.32	69.78	70.79	71.65	75.25
23	66.88	64.62	66.32	67.17	68.26	69.42	69.88	70.74	71.59	73.85
24	67.33	64.61	66.65	67.20	68.46	69.21	69.87	70.79	71.72	76.66
25	67.25	64.48	66.39	67.41	68.08	69.31	69.87	70.76	71.71	75.76
26	66.68	64.45	66.70	67.30	68.05	69.18	69.90	70.79	71.51	74.69
27	66.96	64.52	66.56	66.91	68.48	69.19	69.96	70.63	71.56	76.59
28	67.08	64.65	66.46	67.21	68.44	69.15	69.84	70.60	71.83	74.09
29	67.21	64.39	66.63	67.21	68.35	69.27	69.95	71.02	71.52	74.88
30	66.79	64.52	66.41	67.10	68.72	69.31	69.95	70.75	71.46	74.55
31	67.16	64.65	66.29	67.16	68.35	69.35	69.88	70.84	71.54	75.56
32	66.70	64.45	66.52	67.25	68.18	69.40	69.77	70.89	71.56	74.78
33	66.79	64.45	66.49	67.02	68.35	69.30	69.83	70.76	71.54	74.01
34	66.61	64.33	66.32	67.14	68.38	69.24	69.79	70.78	71.67	73.50
35	67.17	64.46	66.67	67.03	68.60	69.37	69.80	70.87	71.68	76.37
36	67.30	64.53	66.75	66.93	68.40	69.33	69.96	70.72	71.58	75.78
37	67.30	64.44	66.50	67.14	68.12	69.32	70.13	70.92	71.60	74.54
38	66.97	64.46	66.43	67.31	68.15	69.39	69.83	70.68	71.44	74.16
39	67.14	64.22	66.44	67.26	68.42	69.27	69.90	70.76	71.56	73.28
40	66.86	64.50	66.45	67.16	68.56	69.33	69.97	70.75	71.84	76.00
41	66.83	64.67	66.57	67.33	68.18	69.32	69.98	70.67	71.90	74.94
42	66.97	64.36	66.57	66.93	68.28	69.42	69.85	70.72	72.04	73.57
43	66.57	64.60	66.49	67.38	68.41	69.21	70.14	71.08	71.75	73.40
44	67.02	64.45	66.49	67.45	68.22	69.44	69.90	70.67	71.95	75.28
45	67.07	64.67	66.45	67.34	68.56	69.21	69.89	70.90	71.85	72.52
46	67.22	64.52	66.50	67.13	68.30	69.35	70.01	70.82	71.87	73.10
47	67.03	64.45	66.92	67.28	68.18	69.17	70.06	70.73	71.66	70.33
48	66.97	64.45	66.50	67.18	68.32	69.25	69.85	70.70	71.56	70.77
49	66.85	64.35	66.53	67.16	68.22	69.25	69.79	70.62	71.74	74.05
50	68.09	65.16	66.89	67.03	69.29	69.57	70.73	71.47	71.23	75.06

BASELINE INLET, STATION 2

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	72.57	74.54	74.69	76.82	77.02	73.74	78.91	79.81	80.09	78.43
2	69.93	73.82	73.75	75.23	76.60	74.39	77.51	80.13	81.49	81.36
3	68.82	72.46	72.99	73.97	75.51	77.06	75.60	78.43	81.47	79.95
4	66.19	70.93	71.48	73.39	73.81	76.86	74.36	76.03	80.12	80.08
5	64.90	69.21	70.39	71.65	73.68	75.75	72.91	74.95	78.42	80.84
6	63.81	68.18	69.26	71.27	72.21	74.34	71.70	73.78	76.97	80.09
7	63.11	67.20	67.01	70.38	71.62	73.96	70.35	72.19	75.55	77.63
8	62.30	65.96	66.89	68.05	70.61	72.79	69.28	71.77	74.45	78.59
9	61.71	64.85	66.04	67.14	69.99	71.79	68.21	70.38	73.97	75.52
10	61.11	64.13	65.35	67.32	68.81	71.23	68.26	69.95	73.47	78.38
11	61.03	63.88	64.10	65.64	68.17	70.73	67.46	69.58	72.70	75.59
12	60.88	63.40	64.23	65.87	67.31	70.08	66.02	68.49	72.18	77.48
13	60.94	62.96	64.72	66.18	66.55	69.32	65.52	67.27	71.95	76.53
14	60.95	62.67	62.22	63.91	66.15	68.50	65.56	67.28	70.98	76.04
15	61.02	61.62	62.99	64.24	65.52	68.32	64.94	67.25	70.06	74.21
16	60.64	62.04	61.51	63.14	65.16	68.04	65.68	66.66	69.27	71.57
17	61.00	62.43	61.03	63.04	64.76	67.43	65.05	65.91	68.45	74.17
18	60.90	61.87	59.88	63.96	64.46	66.86	63.76	65.46	68.95	69.81
19	61.02	61.62	60.10	62.52	63.80	66.74	63.42	65.32	67.70	72.33
20	61.04	61.46	59.97	61.76	63.04	66.39	63.68	65.03	67.73	69.57
21	61.21	61.30	60.32	60.62	63.02	65.87	63.41	64.55	67.11	74.03
22	61.38	61.12	58.61	61.49	62.73	66.04	63.01	64.96	66.96	72.33
23	61.35	61.41	60.16	62.35	62.63	65.40	63.59	64.22	66.51	73.98
24	61.48	61.05	59.00	61.60	62.52	65.45	63.55	64.16	66.58	75.30
25	61.45	60.92	58.76	60.37	62.15	65.22	62.99	63.92	65.93	71.98
26	61.47	61.58	59.71	61.33	62.20	64.70	63.45	64.80	66.18	71.83
27	61.47	61.61	59.41	61.91	62.29	64.61	63.11	63.93	66.27	72.40
28	62.08	61.39	59.94	59.97	62.11	64.60	62.79	63.90	66.00	72.75
29	61.89	60.97	59.96	61.49	62.00	64.56	62.97	64.57	66.00	73.77
30	62.01	61.51	59.16	61.30	61.84	64.47	63.42	63.99	65.17	70.42
31	62.41	61.59	60.21	62.33	61.76	64.14	63.48	64.68	65.70	71.64
32	63.80	63.30	59.76	61.96	62.87	64.96	63.97	66.21	67.57	70.51
33	62.53	62.46	60.13	63.01	61.89	64.02	63.47	64.37	65.29	68.32
34	62.84	62.69	60.25	60.73	61.69	64.03	63.40	64.22	65.46	72.06
35	62.93	62.78	60.30	60.97	61.53	63.87	63.54	65.23	65.73	71.21
36	63.55	63.68	61.31	62.48	61.99	64.39	63.31	64.71	65.58	73.95
37	64.01	63.42	60.40	63.22	61.96	64.23	64.02	64.41	66.22	74.20
38	64.45	63.69	61.11	62.87	62.16	64.20	64.07	64.90	66.54	71.56
39	64.86	63.47	61.71	63.50	62.45	64.02	63.85	65.98	66.05	74.80
40	65.61	65.15	62.63	64.87	62.61	64.40	64.68	65.52	66.59	71.73
41	66.59	65.12	62.49	64.24	63.02	64.49	64.71	65.50	67.16	73.93
42	66.97	65.47	62.98	64.22	63.48	64.71	65.19	65.86	66.78	73.67
43	68.10	65.97	64.16	65.00	63.91	65.01	65.81	66.62	68.27	73.57
44	69.40	67.19	64.32	65.88	64.71	65.33	65.96	66.93	67.45	73.94
45	71.63	68.92	65.08	66.34	65.36	65.59	66.49	67.50	68.35	74.80
46	74.02	69.70	69.16	68.37	66.19	66.16	67.39	68.02	68.83	72.65
47	76.76	72.42	70.76	70.60	67.56	66.60	69.48	69.64	69.29	73.67
48	77.51	75.54	73.82	74.74	69.57	67.59	71.55	70.37	70.87	76.43
49	76.99	76.55	75.52	76.20	72.35	68.69	75.43	73.67	72.76	75.70
50	74.72	75.21	75.20	77.77	75.75	70.73	78.12	78.21	76.67	79.91

TABLE A3.—Continued.

BASELINE INLET, STATION 3

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1		49.13	66.44	67.88	64.20	57.42	74.59	58.22	71.39	71.71
2		45.75	62.65	70.28	61.53	56.13	73.54	54.04	72.50	71.96
3		45.31	53.69	71.31	54.24	54.96	71.39	49.04	71.53	72.06
4		46.29	45.87	69.60	47.05	54.25	66.10	43.16	70.70	71.99
5		47.26	41.19	66.72	43.80	56.84	56.58	42.51	68.15	71.80
6		48.22	43.44	64.04	46.80	60.38	50.16	44.24	67.45	71.61
7		49.16	45.37	61.54	49.51	65.56	48.36	45.82	69.15	71.61
8		50.09	47.03	59.22	51.96	67.00	46.90	47.26	72.43	71.22
9		51.01	48.48	57.06	50.86	67.84	48.03	48.58	73.51	71.02
10		51.91	49.75	58.70	47.84	62.36	49.22	49.79	73.50	70.81
11		52.80	47.56	57.65	48.05	60.98	51.58	51.51	69.22	70.61
12		54.23	48.84	58.48	50.47	60.20	52.01	51.94	70.33	70.40
13		55.26	52.42	57.54	56.19	61.08	54.45	53.69	69.80	70.26
14		60.31	56.66	61.07	56.58	60.59	55.49	54.55	71.39	69.05
15		56.39	58.88	56.89	54.91	61.04	57.10	56.49	67.63	68.10
16		56.97	55.32	57.68	56.08	61.28	57.87	57.20	69.86	66.70
17		59.77	56.36	58.37	57.97	61.22	59.39	58.49	70.31	70.14
18		58.03	58.29	58.69	57.47	61.08	60.80	59.57	69.24	65.86
19		57.70	57.87	58.90	59.54	61.36	61.74	60.58	68.38	66.63
20		56.77	57.06	59.33	59.98	61.24	62.39	61.46	68.71	63.84
21		55.83	58.37	59.22	60.66	61.74	62.59	62.71	67.51	62.90
22		55.52	61.66	58.48	60.10	61.50	63.09	63.37	66.00	64.78
23		56.53	56.77	58.08	60.90	61.78	62.62	63.60	67.13	64.34
24		60.18	62.57	58.34	61.14	61.98	62.95	64.22	70.12	65.84
25		57.72	57.51	59.64	60.14	61.82	62.66	64.52	70.65	67.70
26		56.97	61.59	58.94	59.02	61.83	62.88	64.54	69.53	69.06
27		56.70	56.55	58.53	59.89	61.40	62.29	64.56	70.73	69.13
28		57.22	58.63	58.33	60.07	61.82	63.47	64.81	71.44	68.15
29		58.92	58.59	58.72	58.75	61.81	62.31	64.46	69.06	69.39
30		60.78	58.95	58.64	59.51	61.56	62.95	64.23	71.96	68.82
31		58.82	59.65	59.27	59.19	61.62	62.65	64.52	69.53	69.80
32		62.41	58.44	58.96	60.53	62.01	63.48	64.73	67.67	70.98
33		57.97	58.77	58.75	58.57	61.69	62.93	64.60	69.52	74.08
34		57.88	58.47	59.27	61.02	61.69	62.97	64.73	68.91	71.44
35		59.55	58.11	59.26	60.31	61.63	63.19	64.73	68.52	74.14
36		59.20	60.53	59.11	59.74	61.65	63.09	64.63	71.18	70.76
37		60.84	60.21	60.01	59.65	61.67	63.25	64.80	70.07	70.04
38		60.36	58.52	59.96	60.69	61.83	63.75	65.07	69.74	71.28
39		59.58	58.96	59.98	60.00	61.69	63.45	65.18	71.18	69.88
40		58.02	58.68	59.77	60.81	62.25	64.20	65.12	66.84	70.91
41		59.42	59.73	60.20	60.16	62.32	63.53	65.44	69.50	73.06
42		61.31	58.83	60.79	60.98	62.31	63.84	65.49	67.39	70.07
43		61.00	58.80	61.32	59.93	62.56	63.83	65.52	70.13	70.85
44		58.20	59.52	60.12	60.48	62.38	63.52	65.17	68.57	72.19
45		57.64	59.75	59.62	60.35	62.34	62.61	64.90	70.93	71.15
46		55.29	59.77	60.63	60.92	62.00	61.87	64.32	68.70	71.53
47		58.81	67.12	58.46	61.84	60.48	60.39	63.17	68.00	70.63
48		62.39	68.61	60.77	62.48	62.15	60.94	62.17	69.40	70.03
49		61.44	69.14	63.12	64.62	60.41	64.31	62.50	68.58	70.51
50		58.05	69.35	65.49	65.38	58.84	72.38	60.68	70.05	71.17

BASELINE INLET, STATION 4

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	64.68	54.16	54.79	57.30	53.27	59.02	59.93	60.04	63.87	67.10
2	64.50	53.38	55.04	56.54	52.55	59.71	58.20	60.07	59.08	64.32
3	64.33	52.64	55.29	55.82	52.86	56.02	58.90	59.92	60.30	58.96
4	64.16	51.92	51.62	55.63	53.88	57.77	58.99	61.14	61.93	56.24
5	60.56	52.15	52.28	53.56	54.26	57.17	58.51	60.48	59.55	61.27
6	65.32	53.20	54.63	54.58	55.27	59.15	61.29	61.29	62.38	62.77
7	62.03	52.15	53.05	54.25	55.48	57.02	59.51	60.88	61.35	66.12
8	66.97	52.15	53.09	54.01	55.83	57.57	59.09	60.16	62.00	64.65
9	64.20	53.09	53.05	53.65	55.64	57.51	59.51	60.58	62.10	65.49
10	60.31	52.55	53.20	54.07	56.06	57.94	59.64	60.88	62.45	65.92
11	59.55	52.91	52.92	54.39	56.09	57.67	59.91	61.40	62.68	64.69
12	57.32	53.25	53.57	53.90	55.84	57.67	59.62	61.43	62.96	62.73
13	63.11	53.48	52.77	53.99	55.93	57.74	59.50	60.96	63.18	65.98
14	63.69	53.40	52.62	54.16	55.83	57.36	59.48	60.99	62.71	67.61
15	66.71	52.89	52.94	54.22	54.79	57.11	59.51	60.94	63.48	65.42
16	63.36	53.13	52.82	54.05	54.63	57.20	59.50	61.13	63.24	63.77
17	67.06	53.09	52.97	53.59	54.40	57.22	59.39	61.18	62.83	65.43
18	62.63	53.47	52.81	53.56	54.11	56.87	58.86	61.01	63.22	67.87
19	63.54	53.28	52.82	53.27	53.88	57.01	58.53	60.89	63.23	66.71
20	67.23	52.97	52.46	52.82	53.80	56.61	58.55	60.62	62.97	64.62
21	62.73	52.70	52.11	53.01	53.47	55.93	58.36	60.45	62.82	67.57
22	66.07	52.75	51.99	52.81	53.19	55.53	58.13	60.11	62.63	66.53
23	61.04	52.48	51.57	52.37	52.92	55.34	57.54	59.99	62.46	65.59
24	63.29	52.08	51.42	52.29	52.89	54.97	57.22	59.58	62.25	67.51
25	61.65	50.84	51.38	51.84	52.50	54.51	57.11	59.09	61.80	67.05
26	61.11	50.80	51.07	51.64	52.93	53.92	56.37	58.79	61.27	63.02
27	63.89	50.15	50.52	51.24	57.78	53.90	55.85	58.34	60.85	63.32
28	65.07	49.31	50.42	50.91	56.80	53.57	56.00	58.09	60.51	62.34
29	63.75	49.34	50.49	51.20	55.34	53.12	55.76	57.88	59.93	62.15
30	60.14	49.05	50.56	50.53	55.33	52.97	55.28	57.64	59.36	64.97
31	59.81	49.14	50.51	50.76	55.32	52.79	55.26	57.35	59.43	60.77
32	61.32	48.77	50.39	50.86	55.31	52.81	55.18	56.99	58.51	60.78
33	62.86	50.97	50.50	50.52	55.29	52.30	54.92	56.93	58.65	62.22
34	64.42	61.36	51.72	52.06	55.28	52.30	54.34	56.91	58.44	62.33
35	66.01	63.08	50.06	56.83	55.27	51.82	55.20	56.29	58.81	62.60
36	67.61	64.65	50.40	63.81	55.26	51.39	58.21	56.81	58.70	59.34
37	67.39	66.22	50.73	67.09	55.25	51.86	54.11	56.80	59.23	59.37
38	67.18	67.79	51.06	65.90	55.23	53.07	52.06	58.51	62.71	59.63
39	66.97	66.46	51.38	68.85	55.22	51.33	50.43	58.65	70.95	64.29
40	66.76	65.18	51.69	67.68	55.21	56.06	53.09	58.78	73.57	66.54
41	66.56	63.95	52.00	66.55	55.20	55.47	56.06	58.92	74.39	68.60
42	66.36	62.78	52.30	65.46	53.25	54.83	59.85	59.04	73.73	69.66
43	66.16	61.65	52.60	64.42	53.83	59.30	64.10	59.17	73.08	69.41
44	65.96	60.57	52.89	63.41	58.63	60.62	69.26	59.29	72.42	68.52
45	65.77	59.54	53.18	62.44	58.21	61.01	69.60	59.41	71.77	66.16
46	65.58	58.55	53.46	61.50	57.31	60.81	68.66	59.52	70.41	63.95
47	65.40	57.60	53.73	60.60	56.44	60.46	66.91	59.63	69.07	65.24
48	65.21	56.68	54.00	59.73	55.61	60.10	65.16	59.74	67.75	66.67
49	65.03	55.81	54.27	58.89	54.80	59.75	63.41	59.84	66.44	68.10
50	64.85	54.97	54.53	58.08	54.02	59.38	61.66	59.94	65.15	69.53

TABLE A3.—Continued.

BASELINE INLET, STATION 5

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	50.75	43.35	67.43	47.30	46.82	43.03	52.86	55.48	56.37	63.03
2	47.83	43.53	65.67	46.41	45.21	42.47	52.63	55.03	60.08	63.83
3	44.84	43.71	61.60	45.54	46.28	41.91	52.81	52.61	55.44	60.90
4	41.78	43.89	50.28	44.70	47.50	47.42	52.68	53.54	51.81	61.40
5	42.25	44.18	45.59	44.82	45.40	47.07	50.90	54.57	53.42	62.16
6	38.58	44.41	44.76	44.63	47.42	46.56	52.58	52.89	52.03	59.28
7	39.73	44.81	45.41	45.53	48.32	47.93	52.64	53.40	51.98	62.66
8	41.30	44.97	45.43	45.42	47.05	48.38	51.91	52.81	54.85	66.34
9	39.27	44.94	45.43	45.45	48.08	47.87	51.52	53.27	53.25	64.13
10	40.90	45.05	45.31	45.08	46.38	48.08	51.81	52.66	54.87	64.26
11	41.32	45.16	45.50	45.35	47.07	48.38	51.53	52.87	53.49	59.21
12	42.37	45.38	45.63	45.40	47.21	47.84	51.27	52.93	55.58	58.04
13	39.36	45.01	45.22	44.95	47.60	47.44	50.84	53.17	53.62	63.57
14	41.05	44.90	45.41	45.43	47.31	47.42	51.33	52.76	53.72	64.92
15	41.63	44.68	45.42	45.65	47.11	47.84	51.40	52.45	53.98	65.50
16	41.86	44.19	44.90	45.09	46.56	48.50	50.72	52.58	53.97	62.19
17	41.77	43.64	44.77	45.36	47.08	47.69	51.26	52.09	53.75	63.95
18	42.72	43.90	45.16	45.89	46.98	47.69	51.23	52.76	54.38	62.67
19	41.78	43.94	45.02	45.56	46.58	47.88	50.88	52.45	54.58	64.74
20	42.57	43.79	44.99	45.64	46.85	47.81	51.06	53.05	54.35	65.14
21	42.08	43.42	44.89	45.80	47.32	47.83	50.93	52.72	55.10	66.37
22	42.91	43.37	44.95	45.97	47.36	47.70	51.07	52.94	54.73	61.59
23	43.54	43.76	45.35	46.37	47.53	47.92	50.99	52.93	54.39	63.75
24	43.47	43.96	45.56	46.58	47.34	47.91	51.31	52.92	54.73	68.04
25	43.80	43.52	45.35	46.56	47.71	48.18	51.55	52.92	54.72	68.29
26	43.49	43.85	45.51	46.58	47.70	48.17	51.35	53.13	55.08	67.07
27	44.00	43.91	45.67	46.83	47.55	48.58	51.26	53.21	55.75	70.40
28	44.53	43.58	45.65	47.10	48.20	48.43	51.65	53.41	55.41	64.82
29	45.01	44.31	46.05	47.21	48.46	48.78	51.97	53.31	56.40	68.03
30	44.55	43.72	45.86	47.37	48.74	48.71	52.05	53.65	55.41	63.42
31	45.14	44.26	46.17	47.48	48.63	48.64	52.55	53.84	55.50	63.86
32	45.02	45.44	46.65	47.28	48.95	49.01	52.84	54.36	56.31	66.54
33	45.67	44.12	47.25	47.74	48.72	49.45	52.49	54.37	56.39	61.58
34	50.91	46.72	48.14	48.46	49.17	49.75	52.71	54.59	56.86	63.97
35	58.39	47.71	56.90	48.95	49.69	49.92	53.19	55.07	57.18	61.06
36	61.27	47.87	50.13	51.30	51.35	50.06	53.68	55.22	57.29	62.97
37	62.28	43.12	50.00	54.48	55.91	50.51	54.36	55.36	56.85	66.70
38	63.31	42.34	48.53	52.47	50.46	50.43	51.94	55.59	57.98	71.31
39	66.21	40.97	52.42	57.88	53.25	49.09	56.20	54.02	62.85	73.29
40	69.33	41.09	63.27	58.53	55.36	48.80	55.88	56.32	63.61	71.93
41	71.63	41.31	67.43	57.69	57.77	48.18	55.58	58.65	64.95	70.80
42	71.08	41.53	68.17	56.53	58.32	47.70	55.28	61.00	65.45	70.08
43	70.09	41.75	68.08	55.39	57.81	47.21	54.98	61.45	65.56	69.35
44	68.30	41.96	67.99	54.28	56.68	46.71	54.70	60.73	64.97	68.60
45	66.13	42.17	67.91	53.20	55.49	46.21	54.42	60.01	64.08	67.84
46	63.84	42.37	67.82	52.15	54.23	45.70	54.14	59.27	63.09	67.07
47	61.44	42.57	67.74	51.13	52.90	45.18	53.88	58.53	62.01	66.29
48	58.93	42.77	67.66	50.13	51.50	44.65	53.61	57.78	60.82	65.49
49	56.30	42.97	67.58	49.16	50.03	44.12	53.36	57.02	59.50	64.69
50	53.58	43.16	67.50	48.22	48.47	43.58	53.11	56.25	58.02	63.87

BASELINE INLET, STATION 6

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	30.09	41.19	41.50	38.93	38.10	42.22	46.28	47.87	54.29	65.62
2	29.40	39.15	40.11	38.08	38.76	42.41	46.82	47.52	50.98	64.19
3	28.74	37.03	38.69	37.55	39.30	42.60	47.31	47.21	51.89	62.57
4	28.98	37.03	37.26	38.34	38.60	42.15	46.98	47.99	58.06	57.83
5	31.90	37.67	37.50	38.36	40.14	44.10	46.96	48.79	62.36	56.21
6	32.30	38.34	37.65	38.58	39.32	45.30	47.85	48.91	59.96	59.48
7	31.07	37.88	37.85	39.18	40.98	44.07	47.85	49.70	59.62	62.24
8	30.09	38.71	38.04	39.25	40.34	43.90	48.31	49.63	57.19	59.79
9	32.36	38.30	38.25	39.31	41.10	45.40	48.13	49.56	57.26	58.68
10	32.49	37.59	38.22	39.83	41.20	45.49	48.10	49.92	58.08	59.37
11	33.31	38.28	38.47	39.63	42.42	46.07	48.69	49.79	56.43	61.21
12	33.24	38.10	38.86	40.23	41.73	45.63	49.21	50.58	54.50	64.64
13	33.84	37.99	39.10	40.20	42.43	46.18	49.20	50.80	52.73	61.59
14	33.65	37.75	39.35	40.75	42.33	46.64	48.97	50.61	54.50	57.93
15	33.76	37.93	39.32	40.70	43.43	46.95	49.51	50.99	51.88	60.34
16	34.39	37.47	39.67	41.54	43.61	46.32	49.52	51.04	55.14	57.13
17	35.86	38.10	39.32	41.97	43.57	46.93	49.90	51.00	54.28	61.58
18	35.26	38.73	39.96	41.74	43.71	47.25	50.05	51.74	54.70	62.44
19	35.78	37.64	40.64	42.11	44.00	47.39	49.78	51.80	56.06	57.96
20	36.40	38.35	40.44	42.08	44.69	47.32	50.35	51.74	54.49	58.37
21	36.40	38.13	40.31	42.17	44.71	47.34	50.40	52.17	55.15	58.19
22	36.98	38.74	41.19	42.68	44.58	47.56	50.55	52.14	55.65	58.17
23	37.02	38.60	40.85	43.04	44.99	48.16	50.73	52.24	57.54	57.50
24	37.58	39.06	41.64	42.67	45.51	48.02	50.59	52.09	56.36	57.09
25	38.18	39.43	41.19	43.14	45.03	48.22	50.87	52.56	56.50	57.87
26	38.63	39.37	41.68	43.64	45.62	48.58	50.81	52.39	57.77	59.37
27	40.51	42.19	42.38	44.03	46.04	49.30	51.18	52.94	56.83	61.85
28	38.86	39.88	41.66	44.19	46.16	48.83	51.12	52.74	56.48	56.19
29	39.32	40.43	42.28	44.25	46.09	49.13	51.34	53.07	56.59	58.34
30	40.19	41.27	42.46	44.54	46.58	48.94	51.40	52.99	55.77	60.29
31	40.12	41.55	42.49	45.38	46.27	49.23	51.41	53.15	56.62	59.46
32	39.65	42.19	42.77	45.05	47.08	50.02	51.24	53.45	57.97	58.15
33	44.67	43.66	42.79	45.11	47.28	49.59	51.69	53.47	56.40	59.49
34	43.85	43.81	44.08	45.00	47.39	50.10	51.86	53.59	57.64	59.24
35	46.51	45.97	44.12	46.53	47.70	50.00	51.98	53.48	57.75	58.97
36	58.96	49.82	44.60	46.38	48.05	50.75	52.05	54.23	59.51	59.14
37	60.70	59.49	49.40	47.46	48.69	47.90	52.26	54.55	59.42	60.34
38	63.57	60.11	48.01	47.89	47.32	51.52	52.53	55.10	63.12	60.73
39	63.38	56.44	41.92	45.70	48.54	47.47	52.09	54.21	62.38	64.52
40	60.62	52.07	42.09	42.93	53.53	48.25	54.04	58.66	64.00	65.83
41	55.97	51.74	42.37	40.15	47.38	49.36	60.88	56.54	65.49	66.75
42	50.39	55.99	42.63	44.29	42.60	55.22	61.67	60.20	64.18	68.32
43	43.73	58.54	42.87	37.21	32.60	56.23	58.87	60.62	69.75	69.69
44	35.86	53.80	49.42	45.29	32.78	54.37	51.21	57.92	69.15	70.84
45	34.92	51.98	49.32	44.34	33.62	49.36	45.62	55.88	72.58	71.10
46	34.02	50.36	48.08	43.40	34.43	42.80	42.72	50.36	71.12	71.01
47	33.16	48.67	46.82	42.48	35.22	41.23	43.58	49.73	68.16	70.18
48	32.34	46.91	45.53	41.57	35.98	41.51	44.36	49.18	65.00	69.18
49	31.55	45.07	44.21	40.67	36.71	41.77	45.06	48.69	61.63	68.09
50	30.80	43.17	42.87	39.79	37.42	42.00	45.70	48.26	58.05	66.91

TABLE A3.—Continued.

BASELINE INLET, STATION 7

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	59.66	39.25	33.76	33.88	35.89	38.82	46.31	50.28	55.57	59.28
2	58.95	38.08	34.37	34.60	36.47	39.35	45.28	52.11	55.54	59.58
3	58.14	37.99	34.96	35.28	37.01	39.83	44.40	53.74	55.51	59.86
4	57.24	39.16	35.55	35.91	37.78	41.91	46.42	50.55	55.33	60.14
5	55.60	36.07	35.86	37.12	38.71	43.97	45.63	51.35	50.57	60.70
6	53.75	38.39	36.03	37.54	38.93	44.01	45.97	51.03	51.34	60.91
7	53.60	38.10	36.57	37.40	39.82	43.61	47.26	49.83	52.45	59.85
8	53.44	38.22	36.77	38.12	39.70	45.04	47.55	51.26	51.43	60.64
9	53.28	36.18	36.97	38.02	40.75	44.26	47.71	50.93	52.21	57.80
10	53.11	36.07	36.93	39.42	41.46	44.59	48.23	52.13	52.65	58.80
11	56.21	35.86	37.14	38.75	41.55	44.21	48.74	51.59	53.61	60.31
12	56.07	35.90	37.66	38.77	41.28	45.19	48.60	51.87	53.56	57.89
13	49.95	36.12	37.52	39.82	42.07	45.99	48.44	52.25	52.93	59.71
14	49.42	35.80	37.52	39.37	41.84	46.16	49.02	52.38	52.35	57.52
15	48.96	36.25	38.23	39.70	42.81	45.57	49.49	51.95	52.63	59.37
16	49.33	35.85	37.89	40.28	43.46	46.60	49.50	52.39	53.27	58.63
17	48.10	36.36	38.27	40.85	43.41	46.90	50.01	52.51	53.46	56.37
18	47.69	36.53	38.52	40.96	43.53	46.72	49.69	52.33	53.72	58.88
19	46.21	36.60	38.60	40.99	43.94	47.26	50.25	52.50	54.19	57.83
20	38.13	40.85	39.51	41.96	44.40	47.47	50.54	53.46	56.09	61.68
21	36.63	36.71	39.72	41.41	44.11	47.68	50.00	53.07	54.16	61.21
22	36.49	36.70	39.13	41.42	44.50	47.75	50.41	53.16	54.33	58.14
23	36.89	37.10	39.14	41.40	44.43	47.72	50.83	53.07	54.66	57.08
24	37.33	37.54	39.65	42.18	44.83	48.08	50.58	53.29	54.97	57.20
25	37.22	37.44	39.84	42.42	45.03	48.09	50.47	53.45	54.66	58.78
26	36.98	37.19	40.18	42.61	45.41	48.08	50.92	53.44	54.90	57.85
27	37.70	37.91	39.77	42.59	45.13	48.34	51.12	53.70	55.10	57.44
28	37.74	37.95	40.25	42.81	45.55	48.39	51.15	53.17	54.80	56.12
29	36.38	38.30	40.79	42.32	45.64	48.97	50.80	53.56	54.95	57.40
30	36.77	38.12	40.21	43.25	45.69	48.80	50.75	53.68	54.94	57.75
31	37.39	38.58	40.47	43.28	45.91	48.81	51.39	53.68	54.98	55.95
32	38.03	38.40	40.78	43.27	45.89	48.95	51.34	54.13	55.50	58.38
33	39.74	39.06	40.84	43.09	46.16	48.93	51.56	54.15	55.38	58.90
34	39.33	39.31	41.03	43.68	46.26	48.90	51.43	54.14	55.69	57.36
35	39.10	39.27	41.12	43.70	46.49	49.21	51.49	54.08	55.70	60.36
36	39.88	39.10	41.63	43.83	46.96	49.36	51.74	54.42	55.67	59.73
37	40.67	39.64	41.18	44.27	46.73	49.68	51.74	54.54	55.67	58.94
38	41.81	39.07	41.58	44.62	46.68	49.81	51.94	54.33	55.31	58.97
39	46.43	39.31	41.30	44.78	47.29	49.79	51.88	54.82	56.34	59.83
40	50.57	39.84	41.25	44.73	46.88	50.14	52.26	54.61	55.96	60.48
41	54.26	41.71	41.87	43.76	47.35	50.69	52.79	54.20	56.51	61.07
42	57.54	49.02	41.64	44.73	48.18	49.77	52.29	54.67	57.66	60.55
43	60.41	54.52	40.88	45.52	48.48	51.05	53.70	58.48	64.69	63.88
44	61.77	53.98	41.73	47.71	51.15	51.88	53.78	60.82	67.47	67.39
45	62.56	48.27	38.41	48.02	50.04	53.04	53.95	62.36	69.06	68.01
46	62.30	44.27	35.52	45.66	41.83	46.87	50.81	59.28	62.60	64.56
47	61.87	35.57	33.76	39.05	36.17	40.29	46.43	59.49	61.44	67.01
48	61.40	43.77	31.86	31.41	34.11	42.02	46.66	54.73	59.39	64.99
49	60.88	42.06	32.51	32.29	34.60	37.65	48.94	45.91	55.64	57.79
50	60.30	40.57	33.14	33.11	35.27	38.26	47.51	48.23	55.60	58.98

BASELINE INLET, STATION 8

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	65.61	67.40	66.04	61.90	42.86	53.64	46.32	55.68	59.16	58.64
2	62.33	66.12	64.27	60.57	47.35	52.69	44.96	49.78	56.67	58.15
3	59.32	65.18	66.78	58.27	44.62	48.10	44.40	45.78	52.26	56.81
4	53.16	65.11	62.40	57.27	47.16	51.29	45.22	50.46	52.41	54.61
5	51.36	63.78	63.11	58.35	42.18	53.02	46.85	49.20	51.04	56.48
6	54.44	59.45	62.61	59.28	44.85	50.17	44.50	44.96	49.74	54.15
7	66.72	57.82	62.26	55.84	41.07	45.64	45.68	46.77	50.99	54.41
8	70.38	60.06	63.84	55.91	38.12	46.43	44.42	48.27	51.31	54.71
9	71.45	59.15	63.29	59.37	39.17	48.97	45.29	46.41	51.50	54.18
10	71.76	56.85	63.18	59.60	39.82	50.91	44.81	48.80	51.01	55.50
11	71.76	61.17	63.37	56.88	40.57	50.68	45.63	48.74	51.99	52.64
12	72.28	61.17	63.91	56.14	39.96	47.55	46.74	50.33	50.51	57.81
13	72.79	59.52	64.20	54.17	40.18	48.45	46.03	50.19	51.34	55.52
14	73.29	57.38	64.07	58.22	39.53	51.02	46.24	48.96	50.96	53.13
15	73.79	60.87	64.46	55.42	41.15	49.30	47.64	49.97	51.95	54.43
16	74.29	60.23	64.90	57.17	41.03	46.96	47.28	49.47	50.97	54.29
17	74.77	63.90	64.73	56.33	40.93	46.31	47.49	49.06	52.01	55.60
18	75.25	66.51	66.26	61.42	47.23	52.27	48.07	50.29	54.43	54.19
19	75.72	66.60	64.76	54.69	41.97	49.66	47.09	49.80	52.70	55.06
20	75.48	66.53	65.29	57.61	43.10	50.15	47.32	50.18	52.03	54.96
21	75.21	63.52	65.23	57.02	43.17	45.98	47.89	50.53	52.37	53.58
22	74.89	64.51	65.08	54.84	43.17	48.73	47.85	50.27	51.46	53.71
23	74.55	64.42	65.31	57.32	42.72	48.50	48.34	51.20	51.97	54.27
24	74.21	65.47	65.28	59.17	42.76	50.59	48.50	51.00	52.51	52.20
25	73.87	66.42	65.62	55.08	43.82	48.68	48.78	50.61	52.55	53.76
26	73.53	65.05	65.41	55.37	43.76	49.41	48.67	50.15	52.63	52.98
27	73.19	64.59	65.68	60.45	43.23	48.90	48.47	50.60	53.27	54.99
28	72.84	64.99	65.47	58.91	43.73	49.84	48.55	50.78	53.29	54.25
29	72.50	63.28	65.63	61.44	44.60	51.10	48.89	51.30	53.15	54.68
30	72.15	65.99	65.56	59.33	44.36	50.39	49.19	50.84	53.13	55.50
31	71.80	63.74	65.59	62.15	44.92	49.18	48.87	51.22	53.25	54.44
32	71.45	62.59	65.73	57.19	44.49	49.60	49.08	51.28	53.32	54.24
33	71.10	62.53	65.55	56.95	45.06	50.75	49.68	51.04	53.48	54.39
34	70.75	63.23	65.67	61.08	44.97	49.31	49.74	51.96	53.35	54.03
35	70.39	64.10	65.81	58.05	45.30	51.87	49.36	51.84	53.59	55.05
36	70.04	64.91	65.62	59.93	45.40	51.90	49.73	51.45	53.72	54.46
37	69.68	64.53	65.71	59.94	45.59	49.46	49.73	51.90	54.08	55.29
38	69.32	62.36	65.74	59.42	45.77	49.92	49.81	51.88	54.29	56.92
39	69.10	64.62	65.69	60.69	46.09	51.28	49.63	51.97	53.94	55.86
40	68.94	62.74	65.70	63.42	45.89	51.80	49.99	52.15	54.24	55.89
41	68.93	65.29	65.71	60.97	46.32	51.28	50.25	52.24	54.28	56.19
42	68.61	64.33	65.65	62.39	46.83	52.22	50.69	52.06	54.75	55.98
43	68.07	64.15	64.88	62.40	47.11	55.06	50.80	52.68	54.43	56.20
44	67.28	66.16	63.93	62.16	47.33	57.08	51.06	52.83	54.76	57.05
45	66.46	68.23	61.84	62.00	50.58	57.85	51.30	52.65	56.06	57.26
46	65.83	70.42	61.52	59.78	52.92	59.47	52.79	52.89	56.86	57.13
47	65.81	71.09	64.47	58.90	57.44	57.83	55.16	56.02	57.67	58.72
48	65.39	70.77	65.20	61.02	52.87	57.11	54.67	58.69	60.21	60.83
49	66.00	69.07	61.75	56.04	53.64	53.56	51.69	56.74	59.83	61.82
50	65.49	68.58	61.70	57.63	49.43	52.28	46.38	57.61	58.25	63.14

TABLE A3.—Continued.

ENHANCED INLET, STATION 1

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	70.63	68.40	68.12	67.50	67.56	67.54	68.07	69.77	71.95	74.21
2	71.45	67.69	67.85	67.62	67.42	67.51	68.31	68.99	71.82	73.83
3	70.16	68.32	68.14	67.49	67.36	67.39	67.88	69.41	71.70	73.99
4	70.39	68.27	68.11	67.93	67.51	67.76	67.76	69.97	71.98	74.20
5	70.50	68.15	67.80	68.00	67.42	67.40	68.10	70.12	71.65	74.02
6	69.78	68.34	68.13	67.30	67.11	67.57	68.29	69.36	72.11	73.31
7	70.69	68.89	67.72	67.57	67.75	67.53	68.00	69.39	71.46	73.71
8	71.09	68.85	67.55	67.77	67.23	67.80	68.07	69.70	72.13	73.74
9	71.24	68.47	68.11	67.55	67.33	67.45	68.07	69.29	71.65	74.10
10	69.98	68.62	68.26	67.28	67.64	67.38	68.29	69.53	71.71	74.13
11	71.80	68.19	67.95	66.97	67.40	67.84	68.07	69.49	71.75	74.05
12	71.23	69.30	68.35	67.65	67.49	67.59	68.39	69.38	72.23	73.83
13	72.01	69.16	67.70	67.65	67.75	67.64	68.32	69.44	71.81	74.10
14	70.22	68.99	68.21	67.57	67.68	67.78	68.29	69.66	71.65	75.40
15	71.93	69.07	68.09	67.54	67.84	68.15	68.46	69.30	71.62	74.24
16	71.49	68.34	68.34	67.91	67.40	67.76	68.01	69.25	72.00	75.08
17	70.84	68.98	68.41	67.56	67.26	67.75	68.16	69.26	71.89	73.27
18	70.90	68.44	67.85	67.93	67.44	67.92	67.93	69.27	71.99	73.81
19	69.53	68.44	67.97	67.54	67.63	67.68	68.25	69.59	71.77	74.21
20	69.52	68.15	68.24	67.49	67.26	67.80	67.72	69.19	71.93	74.03
21	70.81	68.65	68.20	67.70	67.72	67.83	68.20	69.61	71.58	73.97
22	71.69	68.95	67.97	67.15	67.79	67.41	67.84	69.56	71.75	73.25
23	70.28	68.56	68.41	67.52	67.53	68.08	68.10	69.78	71.89	73.88
24	69.80	69.44	67.95	67.88	67.96	67.88	67.92	69.45	72.03	74.87
25	70.12	68.62	67.82	67.35	67.54	67.50	68.33	69.19	71.57	74.33
26	70.99	68.96	67.74	67.97	67.45	67.15	68.03	69.77	71.83	74.20
27	70.80	68.72	67.85	67.80	67.73	67.71	68.15	69.60	72.03	73.59
28	70.78	68.97	68.19	67.22	67.46	67.66	68.18	69.23	71.87	73.84
29	70.00	69.16	67.82	67.32	67.57	67.32	67.98	69.37	71.65	73.93
30	70.86	68.05	68.06	67.35	67.74	67.62	68.48	69.66	72.17	73.54
31	71.83	69.72	67.74	67.10	67.56	67.55	68.22	69.49	71.61	74.36
32	70.05	68.84	67.72	67.36	67.50	67.48	67.90	69.85	72.04	74.02
33	71.31	68.15	68.16	67.40	67.34	67.93	68.29	69.53	71.77	73.17
34	70.43	68.96	67.76	67.34	67.27	67.57	67.90	69.65	72.29	73.44
35	69.56	68.75	68.11	67.54	67.39	67.63	68.46	69.77	71.66	73.55
36	69.97	68.66	67.77	67.30	67.13	67.37	68.45	69.48	72.04	73.84
37	70.58	69.04	68.18	67.39	67.60	67.30	68.09	69.89	71.92	74.40
38	70.03	68.84	68.23	67.52	67.86	67.72	68.10	69.61	71.91	73.84
39	70.76	68.33	67.58	67.42	67.72	67.75	67.93	69.49	72.04	74.01
40	70.90	69.11	67.92	67.14	67.08	67.70	67.93	69.81	71.80	74.56
41	71.74	68.69	67.83	67.59	67.09	67.65	68.29	69.76	71.82	74.40
42	70.18	68.73	68.20	67.71	67.34	67.70	68.49	69.72	72.18	74.11
43	69.82	68.34	68.24	67.40	67.29	67.73	68.33	69.62	71.83	73.56
44	70.33	68.70	68.00	67.57	67.54	67.54	67.90	69.52	71.65	73.81
45	70.49	68.48	68.16	67.48	67.46	67.83	68.46	69.48	72.02	74.38
46	70.64	68.21	67.94	67.47	67.65	67.39	68.19	69.43	72.01	73.84
47	71.08	68.59	67.91	67.41	67.51	67.37	68.10	69.63	71.89	73.64
48	69.29	67.99	67.62	68.08	67.01	67.67	68.24	69.41	71.55	74.20
49	71.02	68.72	68.30	67.32	67.28	67.43	68.35	69.64	71.78	73.66
50	72.04	70.58	68.70	67.79	67.56	67.48	67.91	69.63	72.20	74.28

ENHANCED INLET, STATION 2

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	76.35	76.34	74.83	73.76	72.81	72.09	71.74	71.47	72.23	76.37
2	74.92	77.76	76.71	74.38	75.51	75.46	75.71	76.29	73.31	77.65
3	73.06	76.82	76.77	75.88	76.43	76.49	76.81	78.27	77.49	79.68
4	72.36	74.83	75.40	76.15	74.26	74.59	75.30	79.05	79.36	82.61
5	70.76	73.86	74.90	74.80	72.84	73.29	73.99	76.66	80.30	83.66
6	69.74	71.73	73.32	73.88	71.46	71.99	72.77	75.48	79.13	82.73
7	67.59	70.50	72.04	72.73	70.07	70.35	71.29	73.92	78.57	82.64
8	66.28	69.37	71.32	72.03	68.98	69.93	71.07	72.74	76.99	81.44
9	65.46	67.97	70.09	70.63	68.15	68.98	70.01	72.14	76.00	81.04
10	65.16	66.51	68.84	70.22	67.18	67.97	68.97	71.58	75.03	79.07
11	64.16	65.24	68.28	69.28	66.47	67.01	67.79	70.61	74.14	76.80
12	66.81	64.28	66.46	68.36	65.83	66.74	67.86	69.66	73.25	77.35
13	63.64	63.18	66.04	67.72	64.85	65.72	66.83	68.78	72.61	75.44
14	63.00	63.11	66.01	66.81	64.33	65.40	66.70	68.75	71.86	74.02
15	62.77	62.51	65.34	65.97	63.96	64.94	66.16	68.09	71.06	74.28
16	62.71	62.06	64.76	65.81	63.68	64.68	65.92	67.52	70.76	73.46
17	62.82	61.99	63.56	65.39	63.29	64.12	65.21	66.78	70.52	73.58
18	62.58	61.23	64.00	64.54	62.83	63.63	64.70	66.55	69.18	71.60
19	62.27	60.73	62.65	64.24	62.26	63.25	64.49	65.94	68.97	72.38
20	62.66	60.50	63.77	64.02	62.32	63.09	64.13	65.86	68.68	71.63
21	62.76	60.48	62.75	63.37	62.13	63.06	64.27	65.63	67.85	70.73
22	62.31	60.40	62.05	63.56	61.96	62.73	63.80	65.39	67.74	69.83
23	62.53	61.24	61.96	63.11	61.63	62.56	63.77	65.35	67.59	70.68
24	63.03	60.45	61.67	62.52	61.33	62.35	63.65	65.22	67.36	70.24
25	63.05	60.91	61.79	62.00	61.36	62.14	63.22	64.72	67.03	70.59
26	63.41	60.18	61.88	62.01	61.45	62.11	63.12	64.68	67.03	70.99
27	63.48	60.44	61.38	61.83	61.17	62.13	63.34	64.39	66.85	70.02
28	63.55	60.43	62.94	61.36	61.34	61.99	62.99	64.18	67.04	70.26
29	63.57	60.95	60.78	61.90	61.47	62.13	63.12	64.38	66.81	70.18
30	63.75	60.89	61.41	61.56	61.54	61.99	62.82	64.54	66.74	71.30
31	63.77	61.09	61.04	61.60	61.17	61.94	63.03	64.67	66.36	69.99
32	65.23	63.50	64.12	61.94	61.03	61.95	63.20	64.51	66.92	71.35
33	64.17	60.76	60.84	61.54	60.94	61.99	63.30	64.60	66.93	70.26
34	64.19	61.17	61.39	61.46	61.24	62.07	63.22	65.04	66.99	69.54
35	64.16	61.79	61.64	61.37	61.49	62.18	63.22	64.49	66.83	73.21
36	64.82	62.12	61.08	61.27	61.25	62.29	63.63	64.66	66.63	72.78
37	64.84	61.96	61.32	61.46	61.53	62.32	63.44	64.76	67.48	72.75
38	64.88	62.43	62.04	61.27	61.53	62.39	63.57	64.96	67.46	73.55
39	65.60	63.51	62.33	61.46	61.61	62.36	63.45	65.09	67.26	74.49
40	65.90	62.90	62.76	61.80	62.21	62.75	63.65	65.37	67.66	72.70
41	66.39	63.57	62.49	61.73	62.14	62.73	63.67	65.30	68.02	72.70
42	67.25	64.34	63.24	62.29	62.62	63.09	63.92	65.52	67.78	72.61
43	67.27	64.46	64.07	62.48	62.84	63.57	64.64	65.82	68.21	74.06
44	67.76	65.31	64.68	63.44	63.08	63.53	64.33	65.83	68.38	73.17
45	68.19	66.33	65.10	63.54	63.65	64.11	64.92	66.16	68.68	73.66
46	69.69	67.40	66.30	64.01	63.86	64.42	65.32	66.87	68.84	75.30
47	70.36	68.37	66.56	64.62	64.32	64.94	65.90	67.29	69.39	74.02
48	72.74	70.37	68.18	66.03	65.60	66.04	66.83	68.17	70.13	75.61
49	74.49	73.35	70.31	67.60	66.94	67.49	68.36	68.82	71.21	75.81
50	76.51	76.00	72.48	69.59	68.31	68.48	69.00	69.87	72.08	74.62

TABLE A3.—Continued.

ENHANCED INLET, STATION 3

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	69.40	38.50	60.81	61.55	60.64	58.12	60.97	60.16	64.49	74.72
2	69.42	32.83	60.78	61.72	60.95	58.31	61.67	56.90	63.60	74.56
3	69.44	26.81	60.74	61.88	61.25	58.50	62.34	53.05	62.64	73.68
4	69.45	30.00	60.71	62.03	61.55	58.69	63.00	49.25	61.60	73.07
5	69.47	32.81	60.68	62.18	61.84	58.88	63.64	50.46	60.47	71.60
6	69.49	35.30	60.65	62.33	62.14	59.07	64.26	52.23	59.24	69.97
7	69.51	37.50	60.62	62.47	62.43	59.43	64.87	53.84	57.89	68.16
8	69.53	39.46	60.59	62.60	62.72	61.09	64.00	55.30	56.42	66.14
9	69.54	41.22	60.56	62.73	61.75	61.44	57.85	56.64	55.73	63.61
10	69.56	41.20	60.54	62.77	55.63	56.80	56.41	57.85	58.60	64.77
11	69.58	43.76	59.25	64.35	54.58	57.64	57.20	55.78	64.57	63.49
12	69.59	47.13	58.13	60.63	56.47	57.31	56.93	56.35	65.59	68.55
13	71.74	49.24	59.18	61.00	56.27	57.86	57.44	57.47	61.12	68.88
14	70.32	51.14	56.99	60.94	56.14	57.67	57.99	58.94	60.79	71.51
15	66.74	52.82	58.53	61.58	56.72	58.07	58.10	59.95	62.52	74.94
16	65.44	54.72	58.07	60.39	57.32	58.67	58.39	61.05	63.34	75.56
17	68.24	55.16	57.64	59.55	57.11	59.00	58.87	61.43	63.49	76.52
18	68.44	56.78	57.51	59.58	57.97	59.47	59.63	61.78	64.45	76.71
19	68.85	57.96	58.17	59.54	57.91	59.59	60.06	62.93	64.09	74.21
20	69.69	59.27	58.58	59.40	58.71	59.88	60.53	63.64	65.12	71.80
21	70.92	58.36	59.08	59.37	59.35	59.59	60.62	64.08	65.48	69.39
22	71.86	58.52	58.03	59.92	59.75	59.97	60.62	64.02	65.62	66.91
23	73.44	59.42	58.44	59.31	59.46	59.82	60.79	63.51	65.27	67.33
24	72.85	59.79	58.27	59.66	59.66	59.46	60.66	63.79	64.72	68.26
25	68.80	58.71	58.20	59.77	59.94	59.74	60.65	63.64	64.97	69.77
26	68.80	59.90	58.44	60.03	59.67	59.97	60.68	63.99	65.26	71.45
27	69.53	59.11	58.06	59.98	59.52	60.23	60.64	63.79	65.19	71.39
28	71.37	59.31	58.51	59.53	59.64	60.12	61.13	63.69	65.06	71.87
29	68.63	59.61	58.20	59.82	59.39	59.82	60.89	63.52	65.05	71.97
30	69.67	60.15	58.35	59.36	59.45	59.72	60.95	63.61	65.43	70.95
31	72.73	60.64	58.15	60.25	59.54	59.77	61.04	63.69	64.86	65.07
32	71.53	60.68	59.06	59.66	59.38	59.81	60.89	63.82	64.68	61.06
33	73.90	60.57	58.73	59.71	59.49	60.16	61.40	63.77	65.50	58.50
34	73.65	61.49	59.11	59.67	59.16	59.92	61.63	64.56	65.05	56.31
35	71.66	60.92	59.03	59.75	59.41	60.21	61.52	64.05	64.94	54.33
36	70.41	62.30	59.73	59.95	59.74	60.26	61.88	64.23	65.10	58.34
37	73.79	62.50	58.92	59.96	59.81	60.42	61.81	64.22	65.58	61.37
38	72.56	62.11	59.83	60.00	59.93	60.64	62.07	64.34	65.90	69.98
39	73.08	62.07	59.90	60.69	59.42	60.89	62.16	64.70	65.92	71.07
40	73.05	63.03	60.41	60.31	60.04	60.53	62.30	64.45	65.91	71.29
41	73.23	62.64	60.43	60.63	60.12	60.91	62.42	64.73	66.12	69.72
42	70.99	62.71	60.23	61.58	60.06	60.78	62.49	65.03	66.67	71.13
43	71.83	63.05	60.82	60.89	60.05	61.14	62.81	64.79	66.66	72.08
44	69.18	63.05	59.87	60.77	59.82	61.01	62.78	64.97	66.70	69.97
45	69.21	63.38	60.84	61.10	60.54	61.16	62.58	65.50	66.79	70.51
46	69.29	60.26	60.65	61.71	60.04	61.01	62.16	65.04	66.94	70.87
47	69.31	56.77	60.31	61.04	59.54	60.21	61.81	64.87	66.40	71.94
48	69.34	52.87	60.93	61.01	59.38	59.52	60.75	64.24	66.28	73.15
49	69.36	48.54	60.89	61.20	60.02	59.41	59.80	63.20	64.77	73.70
50	69.38	43.75	60.85	61.38	60.33	57.93	60.26	62.70	65.31	75.29

ENHANCED INLET, STATION 4

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	72.04	52.85	49.52	41.15	47.59	54.53	56.75	60.30	54.66	63.00
2	72.02	51.96	49.31	40.17	47.44	56.19	56.71	55.95	55.41	62.61
3	72.00	51.11	49.11	42.32	53.23	56.12	57.19	57.72	61.25	65.25
4	71.98	51.24	49.72	47.27	58.84	56.68	57.08	56.43	57.27	69.31
5	71.96	56.35	53.78	51.79	60.40	56.68	57.01	58.21	64.08	72.59
6	71.94	60.24	52.24	58.05	57.38	57.51	58.37	59.79	60.06	75.22
7	71.92	64.35	52.17	59.99	58.90	57.04	58.18	58.00	59.73	77.11
8	71.90	66.25	52.18	55.27	56.22	57.27	57.83	58.23	58.77	77.01
9	71.97	63.09	51.91	54.22	59.24	57.21	57.87	58.62	61.25	76.77
10	71.50	64.29	50.84	56.37	57.68	56.81	57.73	59.61	59.82	76.40
11	71.02	66.71	51.57	55.45	56.24	57.45	58.45	59.01	60.81	76.06
12	70.52	70.36	51.95	55.36	57.30	57.45	58.11	58.58	60.49	75.59
13	70.00	71.13	50.60	54.40	57.55	57.45	58.05	58.72	60.21	75.43
14	68.81	70.46	51.77	54.97	57.00	57.33	58.10	59.29	60.71	75.44
15	70.02	69.16	51.40	54.39	56.01	57.06	58.09	58.94	60.54	74.85
16	70.00	67.71	50.47	54.34	56.14	57.16	57.96	58.70	60.33	74.89
17	69.04	66.89	50.80	55.01	56.03	56.75	58.04	59.09	61.14	74.59
18	70.23	68.24	50.71	54.46	56.00	56.75	57.69	58.59	61.23	74.21
19	68.20	65.47	50.29	53.85	55.85	56.63	57.52	58.78	60.08	73.39
20	70.06	66.49	51.02	54.12	55.56	56.33	57.21	58.74	60.44	73.22
21	69.31	67.04	50.67	53.77	55.34	56.17	57.16	58.34	60.08	73.46
22	71.35	63.09	50.86	53.57	55.09	55.93	56.98	57.98	59.87	73.05
23	71.23	66.32	50.11	52.65	54.68	55.41	56.51	57.79	60.04	72.00
24	71.62	65.93	49.61	52.72	55.19	55.14	56.00	57.75	60.09	71.05
25	70.35	64.23	49.87	52.12	55.06	54.90	55.63	57.02	59.38	73.56
26	70.55	67.58	49.44	52.25	53.64	54.62	55.47	56.86	58.43	70.76
27	71.26	63.73	49.27	51.30	53.78	54.27	55.62	56.53	58.29	73.64
28	70.45	64.17	48.40	51.50	53.37	54.50	55.16	56.01	58.09	73.99
29	70.67	64.02	48.34	51.07	52.97	54.24	54.77	55.60	57.48	70.91
30	69.74	64.83	48.38	50.86	52.69	53.65	54.93	55.78	57.31	70.95
31	69.72	66.06	48.39	51.41	52.20	53.46	54.88	55.50	57.02	71.14
32	69.48	65.54	48.17	54.34	52.15	53.45	54.72	55.44	57.20	72.27
33	70.30	66.72	48.73	56.32	51.90	53.67	54.11	55.32	56.59	73.45
34	71.07	68.56	52.64	55.60	51.79	55.07	54.13	55.23	56.33	72.75
35	71.78	68.32	53.70	54.87	51.85	57.34	54.42	55.39	56.30	73.07
36	72.41	68.45	53.38	54.13	53.41	52.23	55.02	55.36	56.21	73.69
37	72.67	72.37	53.07	53.37	52.97	52.37	57.34	55.25	56.68	74.40
38	72.79	72.23	52.76	52.59	52.55	52.51	56.87	55.91	56.55	73.60
39	72.69	69.78	52.47	51.80	52.12	52.65	56.41	57.14	56.98	73.65
40	72.49	66.99	52.18	51.00	51.71	52.79	55.97	58.43	57.14	73.45
41	72.28	65.10	51.90	50.18	51.30	52.92	55.54	58.72	57.40	72.92
42	72.20	63.34	51.63	49.35	50.90	53.06	55.82	59.20	56.72	72.03
43	72.19	61.91	51.37	48.50	50.51	53.19	55.93	55.50	60.19	71.13
44	72.17	60.55	51.12	47.63	50.12	53.32	56.04	55.99	59.65	70.20
45	72.15	59.26	50.87	46.75	49.74	53.46	56.15	56.50	59.08	69.24
46	72.14	58.05	50.63	45.86	49.37	53.59	56.25	57.03	58.47	68.26
47	72.12	56.90	50.39	44.94	49.00	53.72	56.36	57.57	57.81	67.26
48	72.10	55.80	50.17	44.02	48.64	53.85	56.46	58.13	57.11	66.23
49	72.08	54.77	49.94	43.08	48.28	53.98	56.56	58.71	56.35	65.18
50	72.06	53.78	49.73	42.12	47.93	54.10	56.65	59.32	55.54	64.10

TABLE A3.—Continued.

ENHANCED INLET, STATION 5

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	62.86	61.65	52.15	50.25	54.61	54.26	52.08	53.20	57.76	71.76
2	62.28	60.33	49.97	48.95	54.35	52.40	53.68	53.00	54.40	71.07
3	61.11	59.01	47.70	47.59	52.83	52.37	52.58	52.38	55.56	73.46
4	58.95	57.70	45.89	46.15	48.60	52.04	53.69	53.05	55.62	69.81
5	54.57	56.40	45.34	45.73	51.96	51.03	53.41	53.70	53.59	71.83
6	53.91	55.11	44.04	43.94	50.01	50.73	52.63	53.27	53.43	71.37
7	53.75	53.82	45.48	45.98	48.53	51.20	52.26	52.39	53.34	67.74
8	56.01	52.55	44.53	44.38	50.26	51.60	52.97	53.89	54.23	71.17
9	59.68	54.50	44.86	44.82	47.95	50.89	52.82	53.11	54.49	68.79
10	56.84	51.53	44.85	45.30	47.93	51.00	52.38	53.70	53.92	72.56
11	59.58	55.31	44.81	45.91	49.73	50.90	52.19	53.33	54.09	71.85
12	56.62	51.08	45.12	45.55	49.71	50.96	52.43	53.16	53.71	69.97
13	55.16	50.63	45.37	45.63	49.28	51.12	52.40	52.94	53.99	72.69
14	56.52	55.51	45.51	45.91	48.96	50.98	51.85	52.99	53.43	69.82
15	52.73	51.00	46.11	45.84	48.81	50.70	51.75	53.40	54.28	68.84
16	50.90	49.03	45.59	45.79	49.05	50.75	51.98	52.78	53.99	71.91
17	50.30	49.12	45.40	45.96	49.09	50.63	51.79	52.79	54.50	71.02
18	52.72	50.10	45.59	46.13	48.93	50.42	52.11	53.24	54.55	70.33
19	51.24	51.72	45.51	46.34	49.19	50.70	52.17	53.15	54.84	73.46
20	48.84	47.72	45.62	46.40	48.84	50.58	51.78	53.16	54.75	71.57
21	49.85	45.84	45.72	46.73	48.84	50.21	51.87	53.23	55.06	71.18
22	53.21	46.89	45.57	46.59	48.63	50.45	51.90	53.22	55.06	71.08
23	52.47	45.48	45.63	46.44	49.30	50.48	52.05	53.23	55.18	72.59
24	53.63	46.80	45.79	46.81	49.55	50.42	52.18	53.63	55.24	68.66
25	47.71	45.85	45.37	46.77	49.49	50.93	52.29	53.66	55.43	72.82
26	50.79	46.58	45.81	46.82	49.21	50.93	52.05	53.81	55.84	68.50
27	46.00	44.86	45.52	47.13	49.05	50.95	52.46	53.90	55.74	71.86
28	51.84	42.99	45.78	47.08	49.64	51.34	52.45	53.85	56.07	67.66
29	56.93	44.71	46.26	47.25	49.76	51.61	52.72	54.10	56.09	70.15
30	57.53	45.68	46.13	47.50	50.17	51.59	52.90	54.22	56.36	69.20
31	58.79	45.32	46.07	47.97	50.01	51.47	53.15	54.82	56.90	71.05
32	49.26	44.77	46.62	48.06	50.14	52.04	53.48	54.52	56.83	69.87
33	52.03	46.07	46.53	48.89	50.36	52.24	53.41	54.93	57.00	67.51
34	53.06	46.32	47.46	52.97	50.40	52.80	53.70	55.15	57.48	67.70
35	59.74	46.68	47.09	57.46	50.35	53.60	53.68	55.55	58.14	66.46
36	64.42	45.63	47.30	56.55	50.55	57.21	54.04	55.53	58.73	67.62
37	66.31	48.27	48.20	56.70	51.25	61.68	54.29	56.15	57.85	68.60
38	67.14	49.18	52.58	56.83	52.17	62.57	54.31	56.34	59.25	64.99
39	68.16	55.54	62.08	56.96	57.00	64.74	55.39	57.16	56.75	65.47
40	68.21	62.23	66.70	57.95	55.66	66.78	52.87	55.67	55.96	66.30
41	68.03	68.10	67.25	58.70	55.58	68.64	52.45	54.35	58.42	66.86
42	67.75	71.68	67.34	58.80	55.50	68.03	52.41	54.24	59.72	67.95
43	67.25	72.02	66.48	58.61	55.42	67.18	52.38	54.13	55.87	68.52
44	66.73	70.96	64.97	57.78	55.33	65.82	52.34	54.02	56.06	68.90
45	66.20	69.64	63.39	56.85	55.24	64.33	52.30	53.90	56.27	69.30
46	65.66	68.31	61.73	55.88	55.15	62.78	52.26	53.79	56.49	69.69
47	65.12	66.98	59.99	54.86	55.05	61.18	52.23	53.67	56.72	70.10
48	64.56	65.65	58.17	53.79	54.95	59.53	52.19	53.55	56.96	70.50
49	64.00	64.31	56.25	52.67	54.84	57.82	52.15	53.44	57.21	70.92
50	63.44	62.98	54.25	51.49	54.73	56.06	52.12	53.32	57.48	71.33

ENHANCED INLET, STATION 6

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	63.15	48.54	38.92	36.84	48.98	55.84	53.24	53.35	54.55	
2	61.02	48.99	37.79	36.38	48.91	56.28	51.15	52.63	54.00	
3	59.12	49.43	36.65	30.69	47.11	49.58	52.05	51.92	53.92	
4	52.93	49.85	39.98	37.55	50.43	49.74	51.65	51.64	52.50	
5	50.49	41.61	39.26	37.95	45.86	48.63	50.52	52.10	50.93	
6	43.97	43.63	37.39	40.74	45.68	48.96	51.01	52.27	52.19	
7	43.62	40.05	39.31	42.36	46.28	48.43	50.84	52.21	53.87	
8	41.23	42.73	39.03	41.85	47.70	49.09	51.25	52.11	52.72	
9	50.66	42.16	39.39	43.27	46.50	49.61	51.68	52.83	53.10	
10	48.27	42.43	40.42	42.59	47.28	48.60	51.42	52.80	52.98	
11	49.41	41.59	39.33	43.36	46.71	48.73	51.63	52.92	52.32	
12	49.75	42.63	40.43	43.33	47.20	49.22	52.06	53.31	53.42	
13	44.34	41.70	41.00	43.32	46.84	49.38	51.63	53.36	54.00	
14	53.35	41.51	40.98	44.07	47.36	49.57	51.84	53.13	53.95	
15	47.14	42.00	41.26	44.12	47.86	49.75	52.18	53.13	54.20	
16	50.47	41.20	41.56	44.11	47.61	49.31	52.16	54.00	54.83	
17	45.67	41.38	41.87	44.53	47.95	49.44	52.18	53.69	54.86	
18	47.75	40.94	42.21	44.13	48.19	49.54	52.40	54.09	55.21	
19	47.20	40.99	42.01	44.52	48.07	49.87	52.46	54.19	55.18	
20	47.60	41.42	42.17	44.68	48.25	49.75	52.44	54.02	55.03	
21	47.13	41.05	42.40	45.04	48.36	50.24	52.64	54.26	56.05	
22	44.59	40.76	42.24	45.16	48.46	50.22	52.62	54.52	55.91	
23	47.31	40.98	42.40	45.25	48.91	50.12	53.06	54.55	55.62	
24	49.11	41.06	42.81	45.82	48.79	50.55	52.87	54.85	56.57	
25	48.05	42.20	42.63	45.75	49.14	50.37	53.14	54.72	56.31	
26	54.50	41.80	42.92	45.87	49.15	50.39	53.16	54.88	56.65	
27	53.91	41.60	43.27	45.95	48.98	50.45	53.25	54.82	56.59	
28	51.19	41.32	43.33	46.36	49.34	50.45	53.23	54.85	56.60	
29	50.24	41.81	43.43	46.34	49.36	50.74	53.48	55.15	56.61	
30	55.44	41.08	43.85	46.11	49.17	50.94	53.24	55.24	57.00	
31	50.50	41.65	43.63	46.98	49.53	50.69	53.65	55.64	56.64	
32	54.18	41.94	44.12	46.45	49.62	50.71	53.80	55.35	57.04	
33	56.83	44.63	43.75	46.87	49.61	50.84	53.94	55.77	56.92	
34	59.36	48.57	43.68	46.51	49.42	51.09	54.00	55.62	57.20	
35	64.70	48.74	44.00	46.86	49.58	51.17	54.05	55.78	57.32	
36	69.31	45.59	44.47	47.18	50.00	51.25	53.99	56.02	57.73	
37	70.90	44.32	44.17	47.57	50.29	51.08	54.34	55.97	57.54	
38	70.04	43.14	44.75	47.46	50.07	51.56	54.19	56.37	58.15	
39	69.34	42.93	45.46	46.96	49.38	50.33	54.76	56.48	58.39	
40	68.80	43.78	45.47	46.74	51.85	51.01	58.31	57.29	58.63	
41	68.27	41.05	52.27	41.01	48.81	46.40	63.40	61.00	58.47	
42	67.74	44.04	49.17	40.64	47.20	45.20	65.34	60.35	59.55	
43	67.22	44.58	48.04	40.96	48.16	46.14	65.62	59.53	58.94	
44	66.70	45.11	46.91	40.41	49.33	47.66	65.35	58.72	58.40	
45	66.18	45.63	45.77	39.86	49.29	49.07	63.87	57.92	57.85	
46	65.67	46.13	44.63	39.33	49.24	50.39	62.31	57.13	57.30	
47	65.16	46.63	43.49	38.81	49.20	51.63	60.67	56.36	56.75	
48	64.65	47.12	42.35	38.30	49.15	52.78	58.94	55.59	56.20	
49	64.15	47.60	41.20	37.80	49.10	53.87	57.13	54.83	55.65	
50	63.65	48.07	40.06	37.32	49.04	54.88	55.23	54.09	55.10	

TABLE A3.—Concluded.

ENHANCED INLET, STATION 7

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	67.31	48.81	32.27	39.13	59.77	56.54	54.37	53.16	53.86	75.04
2	66.71	48.47	30.52	38.00	61.76	56.73	54.17	54.17	54.40	74.18
3	66.10	48.13	28.82	36.82	61.35	56.91	54.00	55.06	54.90	73.31
4	65.46	47.78	34.77	36.69	57.43	51.29	54.95	55.98	55.83	72.44
5	64.81	47.42	42.31	33.51	47.67	51.60	53.77	55.61	54.47	71.55
6	64.14	47.06	49.86	36.82	55.16	49.72	54.81	53.50	57.58	70.66
7	63.45	46.69	50.61	44.75	52.66	46.32	52.24	51.29	55.53	69.76
8	62.74	46.31	47.23	47.12	49.85	48.90	51.93	53.76	53.15	70.51
9	62.00	45.93	42.34	45.00	48.23	49.22	52.81	52.70	53.98	71.51
10	61.24	45.51	39.40	45.08	53.77	49.74	52.32	53.15	54.86	68.03
11	60.46	36.84	44.67	46.08	45.75	49.47	52.27	53.04	54.07	72.04
12	59.66	36.94	38.95	42.80	47.60	49.10	51.86	52.78	53.95	67.36
13	58.83	37.04	42.82	43.89	45.77	49.74	51.64	53.38	54.45	71.94
14	57.97	37.15	37.97	41.90	46.59	49.20	52.03	53.22	53.35	66.86
15	57.09	37.25	41.52	43.99	47.14	49.71	52.27	53.48	55.46	70.21
16	56.18	37.35	40.19	42.75	45.95	49.31	51.91	53.18	54.47	66.68
17	55.25	37.45	41.11	43.53	46.61	49.79	52.02	53.46	54.00	63.75
18	55.10	37.56	45.17	46.43	47.72	49.53	52.20	53.55	54.03	63.14
19	59.56	37.66	42.05	44.39	47.35	49.82	52.10	53.65	54.57	65.67
20	67.37	40.51	41.90	44.63	48.01	50.25	52.38	53.85	54.82	68.08
21	72.98	42.81	41.74	44.08	47.04	49.68	52.25	53.70	54.07	66.34
22	75.13	42.86	41.41	44.11	47.41	49.84	52.45	53.72	54.68	68.22
23	75.37	42.92	41.12	44.05	47.58	49.84	52.55	53.03	54.31	65.43
24	75.10	42.97	41.55	44.57	48.19	50.00	52.22	53.83	53.98	65.18
25	74.82	43.03	42.58	44.76	47.57	50.16	52.44	53.94	54.75	65.44
26	74.54	43.08	41.97	44.67	47.99	49.96	52.60	54.03	54.84	61.99
27	74.25	43.14	43.16	45.33	48.13	50.05	52.41	53.82	54.75	64.59
28	73.96	45.38	42.99	45.30	48.22	50.05	52.46	53.76	55.19	64.80
29	73.67	47.00	42.98	45.53	48.72	50.10	52.71	54.52	55.13	66.94
30	73.38	44.28	42.20	44.95	48.32	50.42	52.68	53.90	54.69	69.97
31	73.09	41.74	43.37	45.69	48.63	50.35	52.64	54.07	55.11	66.79
32	72.79	44.12	42.70	45.43	48.76	50.42	52.76	54.16	55.16	70.15
33	72.49	43.21	42.93	45.42	48.51	50.38	52.75	54.09	54.68	67.81
34	72.19	46.51	42.90	45.43	48.58	50.61	52.76	54.81	55.11	67.87
35	71.88	46.76	43.56	46.01	49.05	50.86	52.77	54.55	55.80	70.02
36	71.57	47.01	44.15	46.32	49.12	50.55	52.99	54.54	55.49	72.17
37	71.26	47.24	44.13	46.25	49.00	50.94	53.13	54.73	55.70	69.41
38	70.95	47.46	43.26	45.75	48.84	50.86	53.34	54.72	56.47	71.88
39	70.63	47.67	43.46	45.96	49.06	50.81	53.15	54.86	55.76	69.78
40	70.32	47.87	43.49	46.16	49.42	51.00	53.20	55.18	56.24	66.20
41	69.99	49.81	43.68	46.42	49.73	50.65	53.38	54.97	55.98	66.80
42	69.67	51.47	43.72	45.94	48.77	51.25	53.19	55.31	55.95	66.18
43	69.65	51.32	45.20	46.82	49.13	51.27	53.34	56.32	56.06	66.05
44	69.63	51.02	43.71	45.98	50.09	52.75	53.86	56.33	57.22	68.73
45	69.61	50.72	42.18	45.10	51.14	57.82	55.57	58.70	57.43	71.00
46	69.59	50.42	40.61	44.20	52.28	59.47	55.35	61.99	58.42	72.82
47	69.44	50.11	39.01	43.26	53.51	58.64	54.90	51.68	54.84	74.26
48	69.00	49.79	37.37	42.29	54.87	57.46	55.24	54.26	52.58	75.68
49	68.45	49.47	35.70	41.27	56.35	56.10	54.88	50.61	52.58	76.73
50	67.89	49.14	34.00	40.22	57.98	56.33	54.60	51.98	53.25	75.89

ENHANCED INLET, STATION 8

CP	RA1	RA2	RA3	RA4	RA5	RA6	RA7	RA8	RA9	RA10-REL FLW ANG
1	68.25	50.97	50.07	66.81	73.05	59.35	57.09	64.46	64.01	67.20
2	68.29	52.16	50.03	67.55	72.89	63.37	56.35	59.68	59.81	66.78
3	68.33	57.34	50.08	67.22	72.73	63.59	55.65	63.69	60.98	66.85
4	68.37	57.27	50.11	68.04	72.56	60.94	54.99	56.30	60.99	66.93
5	68.41	52.39	51.04	68.56	72.71	57.87	54.37	56.11	54.83	67.00
6	68.44	49.93	50.68	69.46	72.86	57.41	53.78	55.35	56.49	67.08
7	68.48	50.47	50.89	70.35	73.00	58.99	53.21	54.08	57.35	67.16
8	68.52	49.18	49.66	70.70	73.15	55.39	52.68	53.16	56.66	67.56
9	68.55	54.85	48.79	70.45	73.30	54.44	52.39	53.33	61.58	67.96
10	68.59	50.83	46.36	69.68	73.46	52.88	54.81	51.76	59.52	68.36
11	68.62	50.72	42.61	68.83	73.61	51.82	52.24	51.62	57.06	68.77
12	68.66	53.59	38.35	67.86	73.77	48.80	51.76	52.00	58.25	69.17
13	68.69	50.74	34.61	66.77	73.92	48.19	51.72	51.84	59.30	69.47
14	68.72	55.58	34.62	65.52	74.08	48.92	51.45	51.57	55.85	70.54
15	68.76	59.33	35.68	65.82	74.24	48.54	51.24	51.28	58.79	71.62
16	68.79	66.77	36.72	63.70	74.40	48.65	52.04	52.32	60.39	72.66
17	68.82	68.33	37.72	60.86	74.57	48.47	51.68	51.58	61.24	73.71
18	68.84	69.74	38.70	59.87	74.34	49.51	53.85	52.82	60.92	74.77
19	73.20	64.42	39.66	61.58	74.32	48.77	50.17	51.93	59.76	75.85
20	73.20	63.71	40.59	64.16	73.29	49.74	50.91	52.46	58.87	75.91
21	73.06	62.90	41.72	66.13	73.60	48.84	50.50	52.50	59.87	75.01
22	72.90	61.09	42.81	66.89	72.83	48.77	50.32	52.24	57.57	74.58
23	72.74	57.10	43.86	65.93	72.11	48.67	50.64	52.94	61.04	74.13
24	72.57	57.34	44.88	61.33	71.15	49.22	50.74	52.61	59.54	74.60
25	72.41	64.27	45.86	57.12	70.10	48.71	52.10	52.53	58.68	74.48
26	72.25	67.39	46.81	53.33	68.96	49.67	52.19	52.49	60.18	74.36
27	72.08	69.14	46.76	49.92	68.22	49.47	52.37	52.86	57.13	74.24
28	71.92	64.82	45.60	46.82	69.29	49.73	51.93	52.82	59.76	74.11
29	71.75	66.35	41.17	43.99	70.66	49.09	52.35	52.80	58.09	73.99
30	71.58	61.26	39.00	41.86	71.84	49.46	52.48	52.88	60.59	74.10
31	71.41	56.58	38.69	42.18	72.88	49.85	52.40	52.74	58.12	75.13
32	71.24	56.50	38.88	44.24	73.80	49.77	52.55	53.08	59.59	75.26
33	71.07	56.36	39.08	45.77	74.32	49.99	52.80	52.77	60.04	74.72
34	70.90	63.75	41.19	46.53	74.49	50.26	52.51	53.18	58.18	74.16
35	70.73	61.53	45.16	54.47	74.14	49.32	52.50	53.27	58.37	73.59
36	70.55	66.49	49.74	48.89	74.02	49.17	52.73	53.37	59.17	73.02
37	70.37	68.40	51.87	56.67	73.92	49.83	52.59	53.30	57.46	72.44
38	70.20	70.71	53.67	49.25	73.83	50.57	52.80	53.32	59.88	71.85
39	70.02	67.63	53.16	57.16	73.74	50.36	52.86	53.11	59.81	70.60
40	69.84	71.71	52.48	56.00	73.51	50.43	53.13	53.41	58.67	70.91
41	69.66	70.48	51.99	54.87	73.67	50.30	52.94	53.56	58.82	70.88
42	69.48	68.21	50.77	53.76	73.37	50.54	53.04	53.60	60.23	70.68
43	69.44	69.15	48.93	52.69	73.83	50.55	53.22	53.57	59.05	70.49
44	69.36	70.02	45.48	51.63	73.78	50.72	53.50	53.46	60.07	70.15
45	69.18	67.05	43.89	51.64	74.14	51.11	53.70	53.78	59.66	68.98
46	68.99	64.62	43.57	57.86	74.07	51.83	54.00	54.17	59.22	68.93
47	68.81	62.15	45.82	60.09	73.93	52.95	55.02	54.72	59.80	67.55
48	68.62	59.56	47.91	62.05	73.53	54.54	56.22	55.90	60.71	66.46
49	68.16	56.28	49.38	63.84	73.37	57.49	58.99	60.13	61.39	66.62
50	68.34	53.05	49.50	65.47	73.21	58.59	57.87	60.44	62.52	66.32

TABLE A4.—FLOW/GRID DEVIATION VELOCITIES

BASELINE INLET, STATION 1

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	32.91	27.23	29.80	34.46	30.76	33.52	25.48	29.55	30.54	27.91
2	33.08	27.40	30.31	33.50	30.27	33.07	25.78	29.82	31.01	33.93
3	34.11	26.90	30.02	33.81	30.37	33.02	25.72	30.11	29.99	29.03
4	33.86	27.48	30.57	33.73	30.94	32.65	25.72	30.30	30.19	33.06
5	32.39	27.01	30.39	33.99	31.13	32.98	25.48	29.83	30.34	23.51
6	32.70	27.59	30.52	34.21	31.15	32.79	25.97	29.74	30.69	26.31
7	33.49	27.19	30.17	33.50	30.73	33.41	25.55	29.96	29.91	28.41
8	33.26	27.06	29.85	34.25	30.86	32.85	25.35	30.00	30.11	31.58
9	33.73	27.35	29.52	33.55	30.97	33.06	25.83	29.69	30.58	28.27
10	32.39	27.04	30.67	34.13	30.93	32.85	25.28	29.49	30.35	21.96
11	34.19	27.37	30.74	34.08	31.29	32.69	25.57	30.15	31.31	43.46
12	33.30	27.44	30.48	34.50	31.07	32.90	25.40	29.48	31.24	26.35
13	34.07	26.83	29.84	34.04	30.75	33.12	25.45	29.77	30.63	23.77
14	34.37	27.42	30.70	34.10	30.94	33.13	25.29	29.51	31.22	37.98
15	33.59	27.40	30.83	34.00	30.12	32.98	25.69	30.27	30.56	26.27
16	33.99	27.52	29.57	33.48	30.78	33.32	25.39	30.17	30.38	29.65
17	34.09	27.44	29.95	34.69	31.18	33.21	25.25	30.12	30.71	29.99
18	33.97	27.55	29.97	33.81	30.57	33.18	25.48	30.00	31.23	29.92
19	34.29	28.04	30.17	33.88	30.27	32.81	25.63	29.80	31.05	33.91
20	34.02	27.29	30.41	33.86	31.07	32.76	25.74	29.72	30.41	33.37
21	34.41	27.11	30.39	34.32	30.76	32.76	25.65	30.08	30.19	26.63
22	33.57	27.44	30.35	34.25	30.73	33.18	25.38	29.99	30.79	31.72
23	33.49	27.60	29.78	33.87	30.62	33.34	25.64	29.94	30.73	28.78
24	34.04	27.55	30.45	33.94	31.01	32.90	25.64	29.93	30.75	43.07
25	34.68	27.33	29.87	34.44	30.17	33.08	25.64	29.99	31.06	32.63
26	33.03	27.21	30.57	34.15	30.14	32.81	25.56	29.92	30.47	28.04
27	33.79	27.45	30.24	33.40	30.99	32.89	25.93	29.63	30.93	38.66
28	33.34	27.60	30.03	33.94	30.98	32.79	25.57	29.63	31.28	29.85
29	34.32	27.02	30.41	34.00	30.78	33.09	25.79	30.48	30.79	32.98
30	33.13	27.24	29.95	33.74	31.51	33.18	25.80	29.85	30.18	30.66
31	34.00	27.61	29.68	33.89	30.74	33.23	25.58	30.06	30.43	33.01
32	33.11	27.20	30.15	34.04	30.34	33.30	25.49	30.29	30.52	31.40
33	33.18	27.24	30.17	33.65	30.77	33.22	25.56	29.95	30.48	29.50
34	32.70	26.76	29.69	33.77	30.91	32.96	25.53	30.09	30.85	27.95
35	34.06	27.38	30.63	33.57	31.37	33.40	25.48	30.14	31.47	35.86
36	34.31	27.26	30.88	33.51	30.94	33.14	25.72	29.86	30.23	34.83
37	34.08	27.18	30.12	33.87	30.21	33.22	26.35	30.22	30.49	30.88
38	33.83	27.32	29.96	34.40	30.32	33.40	25.61	29.76	30.12	29.91
39	34.36	26.67	29.93	34.12	31.05	33.05	25.62	30.11	30.93	26.92
40	33.17	27.28	29.85	33.89	31.24	33.31	25.89	29.96	31.28	36.66
41	33.40	27.69	30.41	34.26	30.23	33.21	25.92	29.70	31.44	31.57
42	33.62	26.93	30.28	33.48	30.65	33.45	25.65	29.88	32.28	27.67
43	32.87	27.44	30.04	34.34	30.91	32.98	26.30	30.69	31.16	28.30
44	33.36	27.20	30.07	34.79	30.46	33.51	25.75	29.67	31.94	34.58
45	33.81	27.64	30.01	34.21	31.30	32.84	25.75	30.26	31.37	26.50
46	34.08	27.45	30.16	33.77	30.64	33.32	26.02	30.18	31.46	27.80
47	33.87	27.19	30.93	34.29	30.50	33.05	26.07	30.01	30.62	19.15
48	34.25	27.26	30.10	33.90	30.71	33.06	25.65	29.92	30.58	18.20
49	33.46	27.16	30.09	33.84	30.53	32.95	25.34	29.48	30.91	36.23
50	35.21	28.01	30.95	32.73	32.28	33.17	27.40	31.48	28.81	40.56

BASELINE INLET, STATION 2

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	52.97	55.59	52.11	52.54	47.42	33.65	50.27	48.34	43.62	44.51
2	47.69	56.21	51.50	52.69	49.56	41.60	49.87	50.86	49.81	53.60
3	42.69	52.31	50.72	47.24	50.86	46.33	46.85	49.46	54.20	43.01
4	35.49	48.80	48.49	51.77	48.43	49.41	46.14	46.40	52.61	48.13
5	31.73	44.73	46.18	48.56	47.99	48.95	41.54	43.89	46.27	51.65
6	28.63	41.82	43.18	46.38	46.66	46.16	38.40	41.86	44.36	47.61
7	26.58	38.90	37.58	46.35	44.08	46.38	35.70	37.95	44.47	37.92
8	24.54	35.16	38.09	40.87	41.65	43.80	32.05	36.21	41.77	42.87
9	22.77	32.01	34.91	32.23	40.06	41.50	29.07	32.24	37.84	33.67
10	21.02	29.97	33.03	37.43	36.96	40.51	28.72	31.25	36.27	49.65
11	20.75	29.00	30.12	34.84	35.17	38.87	26.79	30.27	35.90	25.86
12	20.43	27.66	29.79	32.74	32.79	37.55	22.55	26.41	33.66	46.13
13	20.37	26.14	30.81	34.02	30.91	35.38	21.11	23.44	35.63	41.60
14	20.57	25.75	24.40	27.40	29.63	33.26	21.31	23.44	32.43	34.58
15	20.18	22.69	25.94	26.77	27.69	32.60	19.20	22.79	26.81	31.80
16	19.31	23.40	22.25	24.75	26.89	32.06	21.08	21.20	25.05	29.77
17	19.97	23.70	20.96	26.90	25.33	30.14	19.47	19.50	23.28	38.11
18	19.68	22.60	17.86	26.57	24.67	28.27	16.70	18.24	26.54	21.28
19	19.77	22.94	18.26	22.34	22.97	27.85	14.97	17.22	20.44	21.63
20	19.72	21.68	17.69	21.70	20.92	26.91	15.58	16.71	22.19	19.64
21	19.98	20.53	18.53	17.46	20.68	25.82	15.18	15.47	18.89	33.09
22	20.23	20.46	14.40	19.79	19.84	25.57	13.63	16.37	19.81	26.32
23	20.07	20.98	17.83	21.41	19.28	24.22	15.21	14.57	18.15	33.63
24	20.21	20.07	14.89	19.37	18.95	24.28	14.84	13.84	17.02	35.49
25	20.04	19.63	14.31	18.29	17.98	23.25	13.42	13.40	15.05	27.71
26	19.98	20.95	16.26	19.01	17.88	22.56	14.41	15.33	17.83	30.99
27	19.89	20.75	15.51	20.16	17.96	21.60	13.51	13.25	16.78	23.88
28	21.02	20.24	16.58	11.62	17.30	21.40	12.70	12.98	15.47	31.94
29	20.47	19.12	16.44	20.51	16.94	21.02	12.85	14.54	16.45	29.21
30	20.56	20.24	14.65	18.80	16.40	21.29	13.85	12.97	13.45	19.16
31	21.23	20.26	16.82	21.03	16.13	19.95	13.82	14.34	14.56	24.82
32	23.74	23.35	15.71	18.25	18.37	21.60	14.45	17.02	16.92	22.60
33	21.17	21.80	16.44	24.18	16.17	19.34	13.69	13.54	13.45	6.50
34	21.55	22.16	16.50	15.66	15.60	19.18	13.38	13.11	14.36	24.42
35	21.59	22.12	16.50	15.84	15.03	18.69	13.57	15.26	14.11	23.01
36	22.59	23.78	18.40	20.01	15.91	19.71	12.98	13.99	13.98	29.84
37	23.43	23.13	16.53	21.88	15.72	19.14	14.49	13.26	15.29	26.89
38	24.14	23.49	17.82	21.39	16.03	18.99	14.48	14.17	15.94	20.90
39	24.62	23.06	18.93	22.40	16.50	18.34	13.81	16.37	14.56	31.58
40	25.99	25.78	20.48	29.08	16.72	19.08	15.42	15.19	15.96	22.42
41	27.73	25.59	20.14	21.61	17.47	19.11	15.30	15.17	17.06	31.71
42	28.32	26.37	20.85	19.22	18.15	19.37	16.18	15.70	15.91	25.05
43	30.11	26.88	22.96	27.53	18.91	19.83	17.23	17.11	19.76	31.57
44	32.24	29.06	23.13	25.93	20.30	20.41	17.33	17.49	16.80	26.09
45	36.17	32.40	24.41	24.69	21.34	20.72	18.16	18.46	18.54	28.68
46	40.93	32.99	31.56	29.71	22.62	21.49	19.67	19.21	19.45	24.16
47	46.45	38.86	34.60	33.35	25.05	22.06	23.26	21.98	19.91	33.15
48	52.66	47.10	39.92	41.04	28.32	23.62	26.58	22.79	22.80	25.34
49	57.31	51.36	45.55	47.03	33.28	25.38	32.32	27.66	24.58	27.97
50	56.22	54.30	49.23	54.14	40.56	28.54	40.30	36.19	32.52	45.59

TABLE A4.—Continued.

BASELINE INLET, STATION 3

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1		5228.54	42.52	60.59	48.35	0.00	51.09	0.00	0.00	0.00
2		0.00	47.30	46.25	0.00	0.00	46.77	0.00	40.81	36.03
3		54.21	-20.36	40.99	-0.67	28.41	34.44	48.31	36.19	48.09
4		0.00	0.00	19.40	-4.04	-656.31	-14.25	-0.17	32.73	54.12
5		0.00	0.00	0.00	0.00	0.00	0.00	1.50	1.90	50.91
6		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.30
7		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8		8.99	0.00	0.00	29.86	18.50	17.75	0.00	0.00	0.00
9		0.00	30.71	18.87	31.28	25.65	15.78	16.58	25.76	0.00
10		6.31	24.08	22.03	22.18	21.34	15.16	18.08	36.93	0.00
11		5.30	13.78	17.12	18.43	20.35	15.52	18.62	25.36	19.05
12		7.03	11.13	20.13	19.69	18.38	12.39	16.19	32.60	29.11
13		7.23	14.43	18.29	27.47	19.45	14.17	17.09	32.44	27.92
14		33.11	19.17	26.54	24.70	17.65	13.34	15.74	34.46	27.98
15		6.31	19.76	13.04	17.49	18.11	13.19	16.18	22.26	18.75
16		5.73	7.19	11.99	17.33	18.33	11.28	14.91	29.90	39.00
17		14.14	8.07	14.88	16.62	17.16	12.18	14.46	30.07	38.99
18		10.55	12.38	13.22	11.98	16.24	12.92	14.97	27.17	18.92
19		55.41	10.23	11.90	15.44	16.03	12.80	13.92	24.28	15.04
20		8.55	9.23	13.93	12.96	14.91	12.59	13.79	23.64	5.05
21		7.14	13.04	13.34	15.70	15.52	12.08	14.76	20.56	3.03
22		7.13	20.21	12.07	13.09	14.40	12.91	13.72	16.39	5.89
23		9.99	8.24	11.93	15.20	15.19	12.78	13.34	18.52	6.59
24		18.40	25.01	11.92	16.06	15.32	13.53	14.06	25.29	10.32
25		13.73	12.77	16.03	14.04	15.23	13.08	15.08	26.06	15.16
26		12.64	21.86	14.77	11.73	15.67	13.84	15.12	23.82	24.00
27		12.52	11.43	14.32	14.27	14.93	12.63	15.45	26.53	28.23
28		14.21	16.51	12.47	14.88	16.22	15.54	16.19	28.28	24.25
29		18.26	16.92	16.34	12.30	16.56	13.24	15.65	23.32	27.19
30		22.68	18.32	15.83	14.37	16.30	15.05	15.27	31.32	33.47
31		19.14	20.09	17.82	14.02	16.74	14.49	16.29	24.65	20.02
32		28.72	18.00	17.51	17.54	18.05	16.77	16.95	20.18	30.68
33		18.55	19.32	17.32	13.27	17.56	15.75	16.88	24.88	23.48
34		18.86	19.10	19.24	19.07	17.80	16.09	17.31	23.90	56.27
35		22.77	18.80	19.15	18.05	18.04	16.99	17.57	23.13	35.60
36		22.69	24.06	19.64	16.90	18.44	16.88	17.66	29.04	34.99
37		25.99	23.81	21.46	16.88	18.72	17.23	18.02	26.89	23.76
38		25.50	20.81	22.09	19.62	19.36	18.65	18.94	26.20	55.08
39		24.30	22.05	22.86	18.15	19.31	18.16	19.45	29.46	21.83
40		21.63	21.66	22.29	20.42	20.81	19.80	19.23	19.03	22.57
41		24.19	24.14	22.93	18.97	21.26	18.50	19.96	26.07	32.67
42		27.23	22.59	24.20	21.19	21.28	19.12	20.19	21.46	32.51
43		26.42	22.47	25.99	18.48	21.97	18.96	20.20	27.07	27.53
44		21.72	23.46	23.38	20.25	21.71	18.25	19.33	23.81	51.75
45		21.62	25.13	22.69	19.76	21.57	16.39	18.48	28.06	26.12
46		17.02	23.53	23.01	21.55	20.86	14.90	17.26	23.40	27.90
47		0.00	43.32	22.24	21.08	17.75	12.24	14.91	21.73	43.18
48		0.00	39.02	0.00	0.00	21.37	12.20	13.26	23.71	24.98
49		0.00	0.00	0.00	0.00	0.00	159.70	170.28	188.39	0.00
50		215.92	199.95	0.00	0.00	0.00	215.89	180.12	0.00	0.00

BASELINE INLET, STATION 4

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	0.00	0.00	0.00	0.00	0.00	-1.23	-2.56	0.12	-4.00	10.84
2	0.00	0.00	0.00	5.59	-5.66	5.73	-1.10	0.64	-6.91	5.35
3	0.00	0.00	7.10	5.56	-4.76	-2.06	0.69	0.33	-1.33	-10.53
4	65.70	1.92	-1.11	5.66	-2.34	2.10	1.08	3.23	4.84	-16.97
5	15.81	1.97	0.70	1.14	-1.27	0.95	0.18	1.94	-2.65	-1.84
6	30.05	4.60	6.52	3.77	0.46	5.40	6.44	3.68	1.10	-0.71
7	18.27	2.46	3.07	3.33	2.43	1.05	2.81	3.20	1.62	9.87
8	32.84	2.68	3.40	2.98	3.05	2.50	2.04	1.83	3.02	4.92
9	27.86	5.06	3.54	2.34	2.84	2.59	3.16	2.86	3.43	6.91
10	13.55	4.07	4.14	3.56	4.02	3.75	3.65	3.73	4.34	7.64
11	12.73	5.12	3.71	4.55	4.30	3.36	4.40	5.04	4.96	5.52
12	8.02	6.08	5.43	3.62	3.91	3.51	3.94	5.27	5.71	-0.08
13	20.53	6.85	3.80	4.05	4.36	3.90	3.85	4.31	6.37	8.33
14	30.32	6.88	3.69	4.64	4.31	3.25	3.99	4.55	5.46	13.25
15	21.82	5.95	4.63	4.97	2.18	2.89	4.18	4.64	7.38	7.60
16	23.28	6.70	4.61	4.80	2.04	3.27	4.35	5.14	6.95	3.13
17	30.98	6.88	5.11	4.00	1.75	3.52	4.28	5.39	6.13	7.42
18	19.36	7.92	4.99	4.13	1.35	2.94	3.34	5.23	7.18	12.23
19	43.44	7.63	5.23	3.72	1.09	3.43	2.80	5.05	7.32	9.94
20	34.39	7.17	4.69	2.93	1.13	2.78	3.03	4.63	6.82	6.08
21	25.32	6.89	4.13	3.60	0.65	1.54	2.79	4.46	6.63	11.47
22	31.55	7.15	4.12	3.37	0.28	0.92	2.49	3.86	6.41	9.80
23	22.62	6.82	3.44	2.67	-0.06	0.73	1.48	3.80	6.15	8.31
24	25.89	6.25	3.37	2.72	0.10	0.19	1.00	3.09	5.85	11.30
25	23.67	3.89	3.51	2.01	-0.47	-0.54	0.98	2.30	5.08	10.57
26	19.02	4.10	3.10	1.83	0.65	-1.53	-0.32	1.83	4.11	3.22
27	0.00	3.00	2.19	1.22	11.43	-1.35	-1.17	1.12	3.43	4.39
28	0.00	1.53	2.23	0.77	0.00	-1.82	-0.66	0.77	2.93	2.85
29	83.38	1.84	2.60	1.61	0.00	-2.50	-0.96	0.53	1.91	2.69
30	0.00	1.52	3.01	0.47	0.00	-2.60	-1.70	0.23	0.93	7.98
31	52.76	1.94	3.15	1.18	0.00	-2.74	-1.57	-0.16	1.21	0.42
32	0.00	1.50	3.15	1.65	0.00	-2.50	-1.52	-0.69	-0.46	0.56
33	0.00	2.94	3.68	1.18	0.00	-3.30	-1.85	-0.64	0.00	3.39
34	0.00	29.56	6.48	0.75	0.00	-3.12	-2.84	-0.51	-0.26	3.66
35	0.00	55.71	3.32	14.01	0.00	-3.85	-0.91	-1.58	0.64	4.43
36	0.00	0.00	0.00	0.00	0.00	-4.51	5.25	-0.35	0.58	-1.62
37	0.00	0.00	0.00	0.00	0.00	-3.29	-2.61	-0.18	1.11	-1.44
38	0.00	0.00	0.00	0.00	0.00	0.22	0.00	3.47	2.48	-1.38
39	0.00	0.00	0.00	0.00	0.00	-5.11	0.00	0.00	33.24	8.41
40	0.00	0.00	0.00	0.00	-2.59	0.00	0.00	0.00	34.12	0.00
41	0.00	0.00	0.00	0.00	9.97	0.00	0.00	0.00	0.00	0.00
42	0.00	0.00	0.00	0.00	5.71	0.00	0.00	0.00	0.00	0.00
43	0.00	0.00	0.00	0.00	7.30	15.07	15.35	46.20	77.33	56.89
44	0.00	0.00	0.00	0.00	18.18	57.22	43.52	63.17	133.84	57.12
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-27.82	18.10
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A4.—Continued.

BASELINE INLET, STATION 5

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-10.90	-20.76	0.00
2	0.00	0.00	0.00	0.00	-4.14	-6.92	-7.01	-5.67	1.23	-7.88
3	0.00	0.00	55.06	-9.34	-8.25	-21.59	-6.47	-10.85	-8.15	-0.58
4	0.52	3.12	-1.31	-6.21	-5.92	-10.94	-6.81	-9.06	-17.36	-8.46
5	1.29	3.65	-0.92	-5.96	-10.57	-12.26	-10.42	-7.07	-11.00	0.83
6	-5.74	4.06	-1.00	-6.49	-6.24	-13.95	-7.04	-10.46	-13.62	-4.40
7	-3.66	4.85	0.48	-4.39	-4.28	-11.07	-6.91	-9.34	-14.38	-1.40
8	-0.98	5.08	0.41	-4.73	-7.27	-10.22	-8.45	-10.56	-7.66	13.73
9	-4.69	4.82	0.28	-4.68	-4.94	-11.56	-9.13	-9.69	-11.95	6.86
10	-1.99	4.87	-0.13	-5.61	-8.97	-10.87	-8.61	-10.92	-9.34	6.17
11	-1.39	4.96	0.20	-5.05	-7.34	-10.46	-9.07	-10.39	-11.93	-7.27
12	0.43	5.32	0.40	-4.99	-7.10	-11.74	-9.62	-10.13	-8.14	-7.24
13	-5.59	4.21	-0.70	-6.05	-6.19	-12.54	-10.48	-9.78	-11.89	3.56
14	-2.52	3.75	-0.36	-5.02	-6.85	-12.57	-9.45	-10.50	-11.76	7.94
15	-1.59	3.04	-0.46	-4.54	-7.38	-11.69	-9.19	-11.12	-11.07	6.74
16	-1.26	1.70	-1.78	-5.95	-8.59	-10.29	-10.69	-10.75	-11.39	1.02
17	-1.62	0.24	-2.20	-5.32	-7.47	-11.95	-9.48	-11.73	-11.41	5.44
18	0.23	0.69	-1.39	-4.18	-7.68	-11.98	-9.49	-10.34	-10.33	2.37
19	-2.00	0.63	-1.82	-4.99	-8.59	-11.53	-10.18	-10.91	-9.99	5.82
20	-0.43	0.13	-1.98	-4.81	-8.01	-11.66	-9.85	-9.69	-10.37	7.40
21	-1.67	-0.89	-2.31	-4.50	-6.96	-11.59	-10.04	-10.27	-8.71	9.15
22	-0.01	-1.16	-2.28	-4.21	-6.86	-11.86	-9.73	-9.84	-9.37	-2.87
23	1.21	-0.39	-1.48	-3.35	-6.51	-11.40	-9.90	-9.71	-9.89	1.96
24	0.88	-0.10	-1.12	-2.93	-6.95	-11.47	-9.21	-9.74	-9.28	14.69
25	1.44	-1.21	-1.69	-3.04	-6.16	-10.82	-8.65	-9.70	-9.23	6.98
26	0.59	-0.64	-1.44	-3.06	-6.14	-10.79	-9.07	-9.24	-8.43	10.21
27	1.55	-0.64	-1.17	-2.57	-6.54	-10.00	-9.23	-9.04	-7.09	17.19
28	2.50	-1.51	-1.33	-2.02	-5.15	-10.34	-8.39	-8.62	-7.75	6.17
29	3.39	-0.05	-0.55	-1.84	-4.63	-9.56	-7.71	-8.73	-5.86	15.41
30	2.23	-1.48	-1.05	-1.55	-4.07	-9.73	-7.48	-8.06	-7.65	-1.32
31	3.36	-0.44	0.00	-1.38	-4.34	-9.83	-6.54	-7.64	-7.34	6.63
32	2.90	2.01	0.00	-1.88	-3.66	-9.11	-5.87	-6.47	-5.83	13.82
33	4.10	-1.02	0.00	-0.93	-4.21	-8.18	-6.54	-6.50	-5.53	-1.00
34	14.18	4.47	0.00	0.57	-3.25	-7.61	-6.04	-5.95	-4.59	5.35
35	27.77	0.00	0.00	1.58	-3.20	-7.17	-5.01	-4.95	-3.97	0.26
36	31.96	8.89	0.00	6.49	1.43	-6.94	-4.04	-4.60	-3.65	3.56
37	41.39	-3.84	0.00	16.10	18.55	-6.01	-2.66	-4.30	-4.63	11.14
38	0.00	-5.65	0.00	0.25	-1.02	-6.12	0.00	-3.70	-2.19	20.21
39	0.00	-9.67	0.00	23.12	79.90	-9.28	1.04	-6.70	33.23	24.39
40	0.00	-8.52	0.00	0.00	0.00	-9.91	0.00	0.00	0.00	34.10
41	0.00	0.00	0.00	0.00	0.00	-11.02	0.00	0.00	51.55	46.36
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.92	70.06	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	88.81	37.29	55.85	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

BASELINE INLET, STATION 6

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	-1.57	-6.88	-4.40	-3.06	-3.34	3.60	7.26
3	-6.96	12.04	3.02	-3.42	-5.86	-4.72	-0.55	-6.21	-10.55	12.94
4	-2.67	13.20	2.78	-1.99	-8.10	-6.35	-1.69	-4.84	13.61	4.54
5	3.19	14.18	3.27	-2.48	-5.15	-2.29	-2.19	-3.43	26.47	1.49
6	3.62	15.31	3.47	-2.42	-7.46	0.11	-0.48	-3.48	15.12	7.11
7	0.19	13.14	3.37	-1.43	-4.05	-3.29	-0.87	-2.01	14.75	12.28
8	-2.59	14.78	3.27	-1.76	-6.03	-4.08	-0.16	-2.53	9.21	4.00
9	2.02	12.85	3.22	-2.09	-4.71	-0.94	-0.98	-3.01	9.38	3.97
10	1.71	10.29	2.55	-1.31	-4.99	-1.12	-1.42	-2.51	10.79	6.41
11	3.05	11.40	2.63	-2.30	-2.36	-0.15	-0.40	-3.17	8.75	8.59
12	2.38	10.16	3.02	-1.28	-4.54	-1.63	0.44	-1.64	1.43	15.94
13	3.27	9.26	3.08	-1.84	-3.25	-0.71	0.06	-1.45	-5.56	9.43
14	2.18	7.95	3.12	-0.96	-3.94	-0.01	-0.86	-2.23	0.84	2.68
15	1.86	7.69	2.51	-1.55	-1.71	0.32	0.03	-1.68	-5.59	8.27
16	2.80	6.00	2.83	0.02	-1.71	-1.58	-0.29	-1.89	2.30	0.56
17	5.73	6.95	1.42	0.60	-2.21	-0.54	0.22	-2.30	-1.23	8.55
18	3.75	7.93	2.46	-0.42	-2.29	-0.16	0.21	-0.88	0.13	10.20
19	4.40	4.57	3.61	0.02	-2.00	-0.22	-0.76	-1.07	3.00	1.81
20	5.33	5.71	2.60	-0.52	-0.80	-0.77	0.20	-1.50	4.36	2.31
21	4.75	4.57	1.75	-0.74	-1.15	-1.11	-0.02	-0.85	-0.60	1.75
22	5.55	5.52	3.37	0.04	-1.86	-0.97	-0.02	-1.19	-0.67	1.62
23	5.02	4.59	2.05	0.45	-1.28	0.05	0.05	-1.29	10.55	0.11
24	5.84	5.14	3.44	-0.85	-0.48	-0.65	-0.61	-1.90	2.31	-0.84
25	6.70	5.50	1.87	-0.18	-1.99	-0.54	-0.30	-1.13	1.00	0.41
26	7.14	4.78	2.54	0.56	-1.00	-0.08	-0.77	-1.82	6.04	3.09
27	11.24	11.18	3.77	1.03	-0.43	1.21	-0.25	-0.88	2.58	9.41
28	6.56	4.90	1.55	0.99	-0.53	-0.22	-0.71	-1.62	-1.17	-4.47
29	7.10	5.55	2.55	0.70	-1.07	0.11	-0.53	-1.16	2.30	0.49
30	8.57	7.21	2.46	0.95	-0.34	-0.66	-0.70	-1.62	-0.65	3.94
31	7.81	7.08	2.08	2.49	-1.40	-0.36	-1.00	-1.54	0.97	2.20
32	6.12	8.10	2.28	1.32	0.06	1.05	-1.68	-1.16	4.69	-0.48
33	19.68	10.89	1.84	1.03	0.14	-0.23	-1.00	-1.36	0.00	1.89
34	8.56	10.37	4.37	0.40	0.02	0.57	-0.93	-1.39	1.93	1.15
35	17.79	11.32	4.10	3.48	0.36	0.01	-0.95	-1.87	2.44	0.51
36	63.75	4.69	4.68	2.69	0.77	1.33	-1.08	-0.54	8.56	0.62
37	44.70	82.20	14.62	4.56	1.80	-6.23	-0.90	-0.10	5.64	2.62
38	90.21	0.00	12.45	5.11	-3.48	23.37	-0.59	0.75	13.97	3.04
39	116.75	0.00	-2.85	0.04	0.75	18.95	-2.20	-1.20	11.03	9.38
40	0.00	0.00	0.00	0.00	19.73	0.00	1.80	5.25	12.77	10.07
41	0.00	-2.71	0.00	-11.67	0.00	-19.14	15.50	-1.82	21.18	25.00
42	0.00	60.87	-34.59	-3.92	-11.45	1.90	45.10	58.63	20.66	54.18
43	0.00	65.29	-2.51	-21.43	-34.57	25.16	60.34	46.79	47.08	71.50
44	-25.94	73.65	16.88	-2.53	-28.66	18.33	15.68	18.80	45.64	69.12
45	0.00	0.00	0.00	0.00	0.00	-17.84	4.40	-5.48	50.43	48.13
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A4.—Continued.

BASELINE INLET, STATION 7

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	36.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	65.53	36.03	17.41	5.90	4.51	3.95	7.68	22.28	19.63	0.00
4	270.27	37.66	20.15	9.24	5.49	8.01	11.90	15.29	18.68	20.74
5	281.61	31.96	19.82	11.59	7.15	11.98	9.98	17.06	9.31	20.92
6	69.95	35.35	19.36	11.93	6.91	11.56	10.22	15.39	10.53	22.20
7	257.08	33.54	19.84	10.35	8.32	10.21	12.75	12.11	12.40	20.29
8	269.22	33.35	19.10	11.60	7.28	12.79	12.79	15.17	9.71	22.01
9	273.15	28.54	18.60	10.38	9.06	10.61	12.52	13.90	11.29	15.65
10	56.89	27.35	17.63	13.06	9.98	10.59	13.07	14.30	11.78	19.00
11	64.47	25.86	17.04	10.40	9.59	8.98	13.50	14.36	13.50	21.02
12	52.32	24.85	17.50	9.50	8.10	10.65	12.77	14.32	12.95	13.11
13	46.69	24.42	16.04	11.39	9.24	11.87	11.42	14.95	10.87	18.49
14	259.50	22.59	15.10	9.30	7.85	11.68	12.07	14.43	8.90	14.10
15	57.40	22.60	15.85	9.32	9.56	9.45	12.71	12.73	9.11	17.99
16	50.03	20.70	14.05	10.01	10.39	11.18	12.00	13.01	10.11	14.81
17	59.00	20.81	14.08	10.51	9.48	11.26	12.59	12.74	9.88	10.10
18	62.81	20.17	13.78	9.96	8.93	10.07	10.97	11.58	10.00	15.66
19	43.48	19.42	13.02	9.18	9.24	10.72	11.77	11.42	10.61	12.18
20	24.92	30.51	14.60	10.79	9.54	10.48	11.63	13.12	14.64	20.41
21	23.91	17.73	14.05	8.58	8.12	10.28	9.68	11.54	9.45	19.05
22	22.89	16.75	11.57	7.70	8.27	9.72	9.96	11.21	9.17	11.83
23	22.84	16.77	10.78	6.92	7.35	8.91	10.29	10.23	9.57	8.75
24	22.78	16.81	11.18	8.08	7.62	9.07	8.96	10.22	9.67	8.81
25	21.59	15.65	10.77	7.85	7.36	8.36	8.06	10.01	8.39	11.68
26	20.15	14.23	10.76	7.53	7.54	7.68	8.49	9.38	8.44	9.31
27	20.89	15.05	9.01	6.74	6.18	7.64	8.31	9.39	8.45	7.78
28	20.17	14.34	9.36	6.54	6.45	7.10	7.79	7.52	7.17	4.84
29	52.00	14.22	9.80	4.57	5.98	7.86	6.28	7.94	7.01	7.14
30	51.10	12.93	7.63	6.14	5.38	6.80	5.54	7.66	6.48	7.46
31	224.24	13.10	7.46	5.50	5.26	6.16	6.46	7.10	6.07	3.19
32	55.32	11.90	7.40	4.79	4.52	5.90	5.75	7.61	6.78	7.80
33	41.98	12.58	6.83	3.64	4.52	5.22	5.68	7.07	6.01	8.38
34	58.05	12.32	6.52	3.90	4.10	4.53	4.78	6.56	6.24	4.86
35	66.29	11.47	5.99	3.74	4.00	4.67	4.35	5.92	5.74	10.72
36	217.31	10.27	6.50	3.37	4.48	4.39	4.37	6.12	5.24	8.81
37	65.52	10.75	4.67	3.75	3.32	4.59	3.84	5.92	4.79	6.94
38	60.60	8.52	4.95	3.94	2.61	4.33	3.73	4.96	3.55	6.50
39	214.63	8.42	3.51	3.69	3.43	3.70	3.08	5.59	5.38	8.02
40	206.68	8.62	2.74	2.91	1.86	3.93	3.39	4.61	4.13	8.81
41	207.93	11.02	3.38	0.08	2.32	4.59	4.02	3.15	4.74	9.55
42	153.27	23.12	2.10	1.53	3.38	1.91	2.27	3.53	6.38	7.60
43	158.20	37.20	-0.09	2.58	3.33	4.01	4.65	10.49	15.99	12.93
44	103.62	55.06	1.13	8.60	7.61	5.52	8.49	16.70	26.57	17.80
45	125.62	44.72	0.00	13.09	4.73	10.69	4.51	14.16	34.06	26.98
46	145.11	46.66	-22.63	0.00	-8.15	-4.53	-2.86	3.63	7.17	10.51
47	210.37	-5.54	0.00	-10.38	-17.98	-25.01	-14.08	7.98	5.23	18.49
48	199.60	8.55	-22.76	-24.87	-22.10	-8.65	-12.55	0.84	5.63	12.77
49	0.00	0.00	0.00	0.00	81.22	86.74	87.32	99.92	125.08	-0.40
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	125.22

BASELINE INLET, STATION 8

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	177.45	135.31	103.00	71.25	35.68	48.06	35.86	47.88	51.55	38.68
2	166.78	124.25	85.47	62.66	48.97	47.92	38.06	35.52	50.74	46.62
3	170.53	122.01	98.03	75.37	47.06	42.80	38.03	34.36	42.27	47.64
4	50.32	232.64	82.89	66.73	53.69	52.15	43.12	47.15	49.01	44.15
5	0.00	131.32	82.15	72.55	45.42	58.22	46.36	47.00	46.42	49.47
6	187.40	70.12	81.24	70.81	53.88	54.18	46.43	43.17	46.05	46.37
7	161.42	273.07	79.99	68.57	49.62	47.41	51.42	50.28	50.13	47.86
8	0.00	96.87	82.47	68.85	43.52	54.41	49.18	53.58	53.66	51.64
9	0.00	89.49	79.19	73.14	48.20	55.84	50.97	51.75	54.93	52.24
10	202.91	81.82	82.62	74.55	48.56	62.28	52.51	58.11	56.49	53.95
11	0.00	110.04	83.68	73.38	51.39	63.28	57.11	59.96	60.78	49.39
12	0.00	105.19	82.72	72.67	50.81	60.91	58.84	64.50	58.09	62.79
13	0.00	288.46	84.85	71.91	53.09	64.05	58.68	66.00	61.43	57.97
14	0.00	83.51	86.86	75.29	51.56	68.13	59.62	63.29	60.90	53.53
15	0.00	91.91	85.67	72.82	56.11	66.67	63.53	66.79	64.86	57.89
16	0.00	89.31	86.15	76.00	55.08	64.52	63.52	65.56	62.96	59.43
17	0.00	97.33	86.35	75.00	56.51	63.75	64.66	65.38	67.11	60.99
18	0.00	111.75	92.17	86.16	71.17	74.63	66.84	67.54	71.73	58.16
19	0.00	109.93	88.47	74.45	60.01	70.47	64.07	67.71	68.88	60.99
20	0.00	105.59	85.56	78.70	62.20	71.36	65.21	68.75	67.82	61.78
21	0.00	90.30	87.36	78.75	62.21	64.03	67.70	70.54	69.44	59.65
22	0.00	95.08	87.33	75.67	63.56	70.30	67.15	69.40	66.13	60.14
23	0.00	90.14	87.56	78.74	62.32	70.58	68.39	72.34	68.07	63.30
24	0.00	103.13	87.02	82.18	62.62	74.65	69.43	72.43	71.09	57.16
25	0.00	102.99	87.03	76.48	64.69	70.97	70.45	71.15	70.13	62.02
26	0.00	101.89	89.58	76.88	65.12	72.46	69.41	70.34	70.91	59.95
27	0.00	103.27	87.76	82.75	63.85	72.21	69.56	71.48	73.33	65.39
28	0.00	101.41	88.56	80.74	64.97	73.13	69.29	71.85	73.02	64.70
29	0.00	91.95	89.04	83.68	67.59	76.88	69.95	74.05	72.23	65.93
30	0.00	111.71	89.60	82.96	66.63	74.93	71.09	71.99	72.65	69.47
31	0.00	92.82	90.45	87.66	68.13	73.23	70.34	73.10	73.02	66.00
32	0.00	95.15	90.60	80.61	67.96	74.36	71.02	73.78	73.19	65.66
33	0.00	91.63	89.99	79.47	68.52	76.54	72.64	72.76	73.95	65.60
34	0.00	92.52	90.83	85.37	68.01	73.81	72.82	75.01	73.00	65.36
35	129.70	103.19	88.77	82.12	69.60	76.97	71.77	74.95	73.83	68.38
36	209.39	103.92	90.10	83.51	69.94	78.18	72.88	73.87	73.95	65.87
37	168.92	105.49	92.51	84.85	70.22	75.45	72.46	75.26	75.49	69.01
38	204.09	98.57	92.01	84.20	70.46	75.40	72.79	74.38	75.80	68.32
39	168.46	111.01	90.14	86.10	71.94	78.20	71.98	75.23	75.10	69.92
40	172.18	100.06	91.25	88.92	71.22	79.11	73.24	75.16	75.16	70.97
41	183.60	114.49	91.56	85.69	72.32	78.63	74.03	76.06	75.93	70.32
42	198.55	109.59	91.48	87.50	73.73	80.47	75.10	75.24	76.24	69.70
43	193.59	107.75	89.66	86.51	73.25	84.30	74.85	76.73	75.23	70.15
44	169.34	110.29	85.90	83.13	70.96	84.79	74.48	76.26	73.98	68.08
45	165.27	130.07	77.56	76.32	70.97	82.86	70.29	71.42	73.49	67.20
46	162.93	183.26	75.64	70.11	66.65	76.05	65.35	63.88	67.59	60.44
47	163.73	174.49	89.48	68.38	69.22	67.41	62.12	60.66	60.30	57.63
48	161.78	158.80	109.03	75.93	49.52	59.63	53.91	60.18	57.37	51.97
49	169.82	241.52	61.60	56.51	63.90	55.41	39.74	53.69	50.92	44.09
50	167.15	300.28	75.22	69.78	61.08	43.08	21.61	51.17	47.34	47.36

TABLE A4.—Continued.

ENHANCED INLET, STATION 1

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	40.32	34.64	33.12	34.58	29.15	29.40	22.02	27.79	31.39	29.88
2	42.05	33.35	32.28	34.61	28.88	29.30	22.52	26.11	31.09	29.45
3	39.20	34.30	33.16	34.36	28.57	28.94	21.52	26.96	30.36	30.25
4	39.42	34.70	33.11	35.32	29.38	29.63	21.27	28.32	31.31	30.08
5	38.82	34.18	32.67	35.41	28.66	28.92	21.91	28.60	30.54	29.48
6	39.45	34.10	33.15	34.05	28.09	29.33	22.39	26.72	31.71	28.21
7	40.25	35.41	32.31	34.33	29.46	29.14	21.94	27.00	30.20	29.04
8	41.19	35.87	31.87	35.00	28.30	29.82	21.90	27.60	31.60	29.02
9	41.28	34.95	32.76	34.57	28.55	28.90	21.91	26.66	30.65	29.53
10	38.92	34.98	33.42	33.82	29.18	28.89	22.39	27.18	30.70	29.89
11	41.54	34.17	32.69	33.04	28.73	29.81	21.80	27.12	30.61	30.32
12	41.84	36.30	33.87	34.50	28.72	29.34	22.50	26.85	31.92	29.29
13	41.83	36.44	32.12	34.71	29.31	29.43	22.26	27.03	30.93	29.81
14	39.89	35.63	33.14	34.42	29.16	29.62	22.30	27.54	30.62	32.45
15	42.19	35.63	32.85	34.35	29.59	30.52	22.58	26.89	30.53	29.68
16	42.42	34.01	33.28	35.26	28.62	29.89	21.72	26.57	31.31	31.83
17	40.34	35.64	33.40	34.33	28.19	29.32	22.07	26.47	31.10	27.98
18	40.74	34.86	32.48	35.03	28.43	29.99	21.58	26.66	31.29	29.15
19	38.54	34.54	32.83	34.49	29.11	29.37	22.27	27.33	30.76	30.54
20	37.92	33.99	32.82	34.51	28.45	29.41	21.04	26.38	31.05	29.65
21	40.01	34.75	33.08	34.67	29.33	29.84	22.25	27.43	30.45	29.51
22	41.94	35.79	32.66	33.27	29.50	29.19	21.36	27.25	30.84	28.15
23	39.71	34.86	33.48	34.39	28.80	30.36	21.80	27.98	31.08	29.31
24	38.53	36.45	32.59	35.42	29.88	29.91	21.81	27.00	31.37	31.55
25	39.02	35.02	32.48	33.63	28.87	29.05	22.50	26.67	30.44	30.61
26	40.65	35.69	32.10	35.56	28.78	28.13	21.72	27.74	31.05	30.26
27	39.94	35.19	32.46	35.41	29.26	29.58	22.04	27.38	31.22	28.21
28	40.74	35.61	33.05	33.88	28.72	29.50	22.13	26.65	31.31	29.18
29	38.89	35.79	32.63	34.07	29.01	28.70	21.77	27.07	30.71	29.30
30	39.80	34.02	32.99	34.16	29.58	29.48	22.82	27.55	31.82	28.94
31	41.93	37.08	32.38	33.42	29.11	29.27	22.15	27.15	30.57	30.46
32	39.83	35.34	31.94	34.03	28.91	29.21	21.52	27.99	31.47	29.66
33	41.45	34.14	33.16	34.18	28.50	30.21	22.41	27.28	30.74	27.95
34	40.10	35.67	32.64	34.14	28.40	28.83	21.66	27.60	32.31	28.38
35	37.62	35.29	33.04	34.49	28.63	29.38	22.73	28.10	30.83	28.85
36	39.06	34.88	32.50	34.27	28.15	28.80	22.37	27.25	31.59	29.62
37	40.19	36.22	33.26	34.15	29.19	28.80	22.33	27.91	31.32	30.69
38	39.13	35.48	33.54	34.56	29.50	29.66	22.26	27.56	31.30	29.24
39	40.34	34.56	32.15	34.16	29.43	29.78	21.53	27.19	31.59	29.88
40	40.52	35.73	32.97	33.69	28.05	29.75	21.63	27.99	31.12	31.13
41	42.75	35.10	32.35	34.60	28.06	29.41	22.44	27.92	31.14	31.10
42	39.47	34.94	33.43	35.01	28.63	29.60	22.95	27.96	32.10	29.78
43	39.03	35.15	33.94	34.32	28.49	29.64	22.49	27.61	31.17	29.13
44	39.67	35.14	32.60	34.62	29.03	29.36	21.88	27.40	30.59	29.72
45	40.24	34.96	33.42	34.34	28.92	30.02	22.86	27.37	31.51	30.10
46	40.64	34.35	32.83	34.32	29.71	29.02	22.16	27.25	31.70	29.60
47	41.00	35.29	32.89	34.37	29.00	28.77	21.76	27.65	31.24	29.21
48	38.07	33.81	32.57	35.73	27.89	29.78	22.40	27.11	30.50	30.12
49	40.68	35.35	33.40	34.29	28.57	29.07	22.90	27.76	30.96	29.02
50	41.13	38.29	33.95	35.08	29.01	29.03	21.72	27.53	31.94	28.15

ENHANCED INLET, STATION 2

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	52.91	48.86	42.39	38.38	32.68	30.16	27.53	25.26	27.05	30.79
2	53.02	55.48	48.84	41.46	44.72	41.83	38.60	32.56	29.64	32.66
3	51.55	56.70	52.54	51.10	48.35	46.70	44.55	45.08	-7.01	35.22
4	48.98	55.27	51.87	54.80	49.35	45.54	41.80	46.75	-2.03	32.10
5	45.35	52.98	51.32	54.12	47.13	44.40	41.29	46.19	50.47	43.91
6	43.02	48.98	50.23	51.92	45.83	43.24	40.22	44.52	51.95	52.50
7	37.15	45.53	48.05	50.37	41.36	40.32	38.60	41.01	48.55	56.26
8	33.90	42.89	45.93	48.48	37.79	37.39	36.32	38.24	47.87	52.05
9	30.78	39.94	43.17	45.50	36.87	35.34	33.33	37.11	44.67	51.42
10	29.00	35.20	38.42	44.18	34.58	33.06	31.08	35.97	41.00	48.08
11	33.80	32.37	38.10	41.54	32.03	30.39	28.31	33.31	39.78	42.32
12	37.39	30.28	36.35	38.99	30.42	29.41	27.96	30.27	37.73	43.43
13	24.79	26.33	35.19	37.25	27.07	26.56	25.60	28.20	35.55	37.14
14	27.11	26.59	33.21	35.23	25.87	25.46	24.66	27.91	33.54	34.47
15	24.14	24.91	31.65	32.65	24.52	24.03	23.18	25.73	30.87	35.10
16	23.76	23.51	30.20	31.57	23.54	23.06	22.24	24.55	30.14	32.63
17	23.78	23.08	26.73	30.60	22.32	21.48	20.37	21.77	29.31	31.72
18	23.68	21.68	28.17	28.03	20.92	20.11	19.06	21.33	25.22	27.14
19	22.71	19.95	25.75	27.63	19.84	19.08	18.13	19.70	24.94	30.13
20	23.38	19.30	26.75	26.93	19.60	18.47	17.17	18.98	23.72	26.23
21	23.39	19.11	24.45	24.52	19.05	18.47	17.69	18.67	21.22	23.58
22	22.56	18.69	22.74	25.04	18.59	17.56	16.39	18.12	21.96	21.86
23	22.55	20.60	22.51	24.51	17.49	16.85	16.06	17.51	20.06	24.32
24	23.41	18.44	21.51	22.75	16.50	16.17	15.70	17.07	19.99	22.56
25	23.69	19.57	21.72	20.64	16.70	15.61	14.45	15.71	19.34	23.36
26	24.14	17.75	21.64	20.74	16.75	15.51	14.22	15.72	18.79	23.85
27	23.94	18.21	20.64	20.29	15.93	15.44	14.85	14.99	18.04	22.17
28	24.19	17.98	23.69	19.34	16.09	14.96	13.79	14.28	18.32	21.53
29	24.12	19.14	18.51	19.80	16.45	15.24	13.99	14.50	17.48	21.65
30	24.35	18.89	20.26	19.24	16.54	14.74	12.98	14.90	17.44	23.89
31	24.28	19.17	19.56	19.20	15.49	14.55	13.58	15.12	16.40	20.88
32	26.89	23.63	25.34	19.66	14.89	14.42	13.89	14.59	17.52	24.07
33	24.93	18.32	18.40	18.73	14.73	14.52	14.22	14.74	17.51	20.61
34	24.71	18.99	19.80	18.33	15.34	14.58	13.79	15.72	17.49	18.98
35	24.53	20.04	20.05	18.01	15.71	14.66	13.60	14.24	17.11	27.24
36	25.59	20.61	18.23	17.62	15.08	14.85	14.54	14.48	16.44	26.08
37	25.81	20.11	18.95	18.11	15.68	14.89	14.06	14.67	18.40	25.59
38	25.53	21.16	20.43	17.39	15.44	14.83	14.18	15.06	18.14	27.91
39	26.89	23.01	20.91	17.78	15.51	14.59	13.69	15.21	17.47	29.52
40	27.40	21.71	22.07	18.18	16.86	15.48	14.13	15.71	18.38	25.37
41	28.25	22.93	20.77	17.81	16.55	15.27	14.03	15.57	18.95	24.77
42	29.78	24.27	22.16	18.90	17.34	15.94	14.55	15.89	18.35	25.10
43	29.63	24.48	23.84	19.21	17.57	16.73	15.87	16.34	19.07	27.95
44	30.59	25.78	24.60	21.13	17.93	16.52	15.13	16.24	19.28	25.64
45	31.28	27.56	25.48	20.96	18.95	17.64	16.32	16.72	19.72	26.53
46	33.83	29.36	27.61	21.72	19.13	18.11	17.06	18.20	19.96	29.21
47	34.92	30.84	27.38	22.82	19.94	19.00	18.00	18.90	20.92	27.71
48	38.95	34.27	30.27	25.18	22.26	21.06	19.78	20.50	22.10	29.53
49	42.64	39.24	34.04	28.10	24.34	23.56	22.62	21.52	23.90	29.90
50	48.71	45.10	37.41	31.27	26.56	25.03	23.38	23.15	25.39	26.38

TABLE A4.—Continued.

ENHANCED INLET, STATION 3

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.80
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.17
3	0.00	1.32	0.00	0.00	0.00	23.21	51.51	0.00	0.00	0.00
4	0.00	0.00	0.00	121.35	-2.06	119.82	118.05	23.79	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.19	29.01	45.35
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.84
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	18.32	1.94	25.48	0.00	0.00	0.00
9	37.56	12.79	-25.68	32.05	10.87	8.97	13.20	2.35	-8.15	0.00
10	45.59	11.25	11.26	15.53	12.79	8.38	11.68	24.48	6.29	-1.45
11	34.03	11.28	15.60	25.11	15.89	16.38	12.24	20.11	13.56	-15.84
12	34.09	14.90	19.26	18.80	20.39	14.17	10.22	18.05	28.46	49.41
13	36.70	14.90	22.54	21.37	19.83	13.47	9.53	17.38	17.93	12.62
14	33.61	13.80	16.58	22.97	18.30	11.55	9.00	17.52	16.52	20.96
15	28.56	13.68	20.35	25.81	17.82	10.57	7.31	16.49	19.40	33.72
16	20.33	14.13	18.11	22.40	17.08	10.64	6.91	15.95	19.20	32.25
17	30.79	11.73	16.51	19.77	14.42	9.14	6.35	14.37	17.28	47.99
18	43.15	11.56	14.32	19.39	15.55	9.43	7.28	12.35	17.13	35.71
19	32.58	13.24	16.60	19.06	14.22	8.22	6.71	12.87	13.71	40.08
20	43.12	15.96	16.63	18.90	15.09	8.78	7.07	12.73	15.03	27.61
21	37.57	12.37	16.93	18.78	14.26	8.18	7.05	13.11	14.75	43.10
22	39.53	14.65	13.97	19.38	14.38	9.63	7.19	12.39	14.13	15.35
23	42.87	17.99	14.62	17.63	13.40	9.40	7.93	11.87	13.44	31.52
24	43.13	17.06	14.77	18.66	13.46	8.88	7.92	12.58	12.34	33.31
25	35.22	16.42	14.97	18.02	13.83	9.95	8.17	12.40	13.07	58.38
26	34.69	20.48	16.05	18.33	13.91	10.78	8.58	13.45	14.00	22.78
27	37.65	18.34	15.41	18.39	13.93	11.81	8.74	13.25	13.92	37.15
28	43.98	19.48	16.47	18.35	14.58	11.89	10.23	13.35	13.99	29.58
29	35.88	20.58	17.25	19.11	14.42	11.49	9.94	13.11	14.18	41.58
30	39.93	22.17	17.84	17.79	14.90	11.61	10.38	13.68	15.29	45.14
31	46.58	24.02	17.77	21.13	15.46	12.12	10.85	14.03	14.32	21.37
32	44.15	25.07	20.37	20.58	15.56	12.49	10.78	14.60	14.04	29.55
33	50.21	24.97	20.06	20.54	16.19	13.67	12.25	14.65	16.16	30.46
34	48.99	27.91	21.44	20.83	15.75	13.44	13.17	16.76	15.41	45.28
35	51.10	27.24	21.70	21.80	16.71	14.43	13.14	15.88	15.31	6.46
36	42.47	30.21	24.01	22.60	17.78	14.91	14.21	16.56	15.97	46.23
37	51.46	31.02	22.24	22.98	18.32	15.61	14.33	16.88	17.32	-12.68
38	49.52	30.58	25.16	23.48	18.97	16.30	15.18	17.28	18.28	33.39
39	58.55	31.05	25.21	25.39	18.09	17.12	15.65	18.30	18.45	34.98
40	51.57	33.45	26.88	24.79	19.85	16.68	16.07	17.87	18.52	23.61
41	51.77	33.14	26.93	26.02	20.09	17.65	16.64	18.61	19.30	19.63
42	48.03	33.30	26.58	28.24	20.22	17.52	16.95	19.44	20.65	37.12
43	51.71	33.95	28.50	27.24	20.49	18.55	17.75	18.86	20.64	24.70
44	44.55	33.49	25.71	26.52	19.93	18.20	17.67	19.32	20.76	13.83
45	60.77	32.80	28.24	27.97	21.54	18.51	17.34	20.36	21.01	41.18
46	62.11	0.00	27.68	29.66	20.35	18.17	16.33	19.40	20.97	36.24
47	86.02	0.00	23.66	28.21	19.20	16.45	15.53	19.04	19.84	35.39
48	0.00	0.00	29.96	28.67	18.90	14.98	13.51	17.39	19.58	46.48
49	0.00	0.00	0.00	0.00	158.97	153.75	161.42	171.52	181.77	233.72
50	0.00	0.00	0.00	0.00	0.00	149.38	167.23	173.53	186.10	246.35

ENHANCED INLET, STATION 4

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	0.00	0.00	0.00	0.00	0.00	10.56	-0.36	0.02	2.38	0.00
2	0.00	0.00	0.00	23.26	-18.03	-1.50	-4.38	-8.29	-1.11	-0.95
3	0.00	0.00	0.00	10.64	0.00	-1.78	-3.08	-3.56	0.45	0.00
4	0.00	19.14	-11.03	0.00	9.62	-0.36	-3.26	-7.28	-5.79	0.00
5	0.00	31.72	4.23	0.67	13.57	-0.14	-3.25	-3.15	7.33	28.51
6	0.00	76.84	0.00	12.12	6.11	2.00	0.07	0.54	-2.33	45.26
7	50.52	73.78	2.20	18.25	10.23	1.13	-0.17	-3.26	0.08	32.17
8	0.00	56.08	1.20	5.69	3.98	1.86	-0.76	-2.57	-3.69	48.78
9	47.00	43.26	0.84	3.56	11.13	1.93	-0.47	-1.52	1.49	45.50
10	0.00	50.45	-1.34	8.52	7.83	1.23	-0.59	0.87	-1.07	28.80
11	67.38	29.71	0.59	6.88	4.74	2.89	1.21	-0.28	0.93	37.35
12	46.33	40.08	1.69	6.95	7.35	3.09	0.64	-1.04	0.42	38.35
13	39.00	48.57	-1.14	4.99	8.20	3.32	0.71	-0.56	-0.02	44.79
14	29.13	49.41	1.78	6.49	7.11	3.25	1.02	0.86	1.19	39.60
15	39.25	35.22	1.19	5.42	5.07	2.83	1.18	0.28	1.00	39.83
16	64.27	33.75	-0.61	5.49	5.52	3.24	1.10	-0.06	0.72	36.35
17	36.38	31.82	0.35	7.15	5.51	2.55	1.45	0.96	2.58	36.73
18	40.96	35.50	0.41	6.20	5.62	2.75	0.90	0.07	2.89	36.20
19	18.20	28.31	-0.24	4.97	5.52	2.69	0.71	0.65	0.64	39.67
20	41.40	33.12	1.55	5.79	5.04	2.25	0.25	0.73	1.53	28.30
21	31.76	38.19	1.04	5.26	4.75	2.10	0.35	0.06	0.96	31.70
22	47.41	18.79	1.67	5.06	4.40	1.78	0.16	-0.50	0.69	34.24
23	39.63	31.52	0.36	3.28	3.73	0.89	-0.62	-0.70	1.18	24.12
24	54.57	31.41	-0.43	3.66	5.00	0.54	-1.49	-0.61	1.44	16.95
25	33.61	29.31	0.36	2.59	4.95	0.26	-2.05	-1.92	0.17	21.75
26	43.22	36.63	-0.28	3.11	2.17	-0.12	-2.17	-2.06	-1.56	16.41
27	56.45	27.99	-0.37	1.37	2.68	-0.62	-1.67	-2.57	-1.69	20.48
28	34.29	28.98	-1.88	2.01	2.86	0.07	-2.39	-3.41	-1.93	25.58
29	47.50	50.87	-1.75	1.36	1.44	-0.25	-3.04	-4.07	-3.00	17.15
30	58.88	42.16	-1.42	1.15	1.08	-1.25	-2.50	-3.53	-3.18	41.51
31	0.00	59.72	-1.15	2.53	0.29	-1.42	-2.39	-3.96	-3.58	21.46
32	54.82	43.84	-1.33	8.56	0.44	-1.22	-2.54	-3.87	-3.11	24.87
33	0.00	36.59	0.02	12.99	0.16	-0.55	-3.64	-3.94	-4.16	26.11
34	0.00	38.69	7.73	0.00	0.16	2.57	-3.37	-3.97	-4.55	27.04
35	68.24	59.25	9.48	0.00	0.52	8.65	-2.57	-3.47	-4.46	22.76
36	64.22	40.16	0.00	0.00	4.05	0.00	-1.12	-3.36	-4.58	34.04
37	77.66	51.28	0.00	0.00	0.00	0.00	3.93	-3.38	-3.37	25.30
38	72.15	60.51	0.00	0.00	0.00	0.00	0.00	-1.87	-3.49	33.65
39	76.42	58.65	0.00	0.00	0.00	0.00	0.00	0.91	-2.43	25.62
40	0.00	45.55	0.00	0.00	0.00	0.00	0.00	3.86	-1.93	27.56
41	0.00	60.52	0.00	0.00	0.00	0.00	0.00	6.34	-1.22	0.00
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-2.39	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A4.—Continued.

ENHANCED INLET, STATION 5

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	0.00	0.00	0.00	0.00	0.00	0.00	-7.85	-9.39	-3.19	21.03
2	0.00	0.00	0.00	0.00	7.12	-1.43	-4.63	-10.05	-8.17	18.19
3	0.00	0.00	0.00	-5.60	4.78	-1.55	-7.14	-11.56	-6.41	26.08
4	48.05	0.00	0.54	-2.34	-4.24	-2.37	-4.74	-10.35	-7.17	13.91
5	26.06	0.00	0.51	-3.40	3.62	-4.65	-5.41	-8.92	-11.26	20.12
6	21.09	0.00	-2.63	-7.61	-0.33	-5.36	-7.14	-9.96	-11.42	18.95
7	-0.42	0.00	0.63	-3.11	-3.66	-4.33	-7.91	-11.70	-11.90	8.70
8	17.71	0.00	-1.78	-6.85	0.11	-3.47	-6.27	-8.51	-10.33	19.98
9	67.56	0.00	-1.09	-6.07	-5.19	-5.11	-6.60	-10.09	-9.91	15.41
10	0.00	0.00	-1.23	-5.09	-5.23	-4.85	-7.56	-9.02	-11.28	22.10
11	20.60	23.62	-1.47	-3.69	-1.20	-5.08	-7.96	-9.68	-10.96	23.32
12	-1.66	0.00	-0.84	-4.64	-1.29	-4.97	-7.39	-9.99	-11.72	15.16
13	62.21	15.82	-0.35	-4.51	-2.33	-4.60	-7.43	-10.49	-11.15	25.40
14	25.54	33.72	-0.13	-3.90	-3.06	-4.91	-8.52	-10.19	-12.27	16.93
15	-2.71	18.14	1.18	-4.14	-3.42	-5.55	-8.70	-9.38	-10.49	10.95
16	11.58	12.27	-0.17	-4.33	-2.92	-5.43	-8.20	-10.63	-11.16	21.60
17	30.08	11.05	-0.72	-3.97	-2.88	-5.68	-8.58	-10.55	-10.01	18.83
18	21.19	15.01	-0.39	-3.64	-3.28	-6.18	-7.86	-9.42	-9.87	17.52
19	14.51	21.65	-0.70	-3.22	-2.71	-5.53	-7.67	-9.66	-9.31	24.86
20	12.86	9.12	-0.55	-3.14	-3.52	-5.82	-8.49	-9.59	-9.41	20.91
21	14.34	4.82	-0.44	-2.43	-3.57	-6.61	-8.29	-9.36	-8.71	17.91
22	22.59	6.76	-0.87	-2.83	-4.08	-6.10	-8.13	-9.35	-8.80	20.47
23	20.71	3.46	-0.86	-3.23	-2.61	-6.08	-7.80	-9.29	-8.43	23.88
24	21.64	6.16	-0.60	-2.45	-2.08	-6.18	-7.52	-8.45	-8.25	9.95
25	9.58	3.96	-1.64	-2.60	-2.25	-5.11	-7.25	-8.25	-7.80	26.35
26	18.89	5.42	-0.76	-2.57	-2.88	-5.12	-7.71	-7.97	-6.98	14.68
27	0.76	1.46	-1.52	-1.92	-3.28	-5.09	-6.84	-7.74	-7.06	20.31
28	9.16	-2.90	-1.05	-2.09	-2.02	-4.26	-6.80	-7.75	-6.34	12.23
29	35.50	0.82	-0.09	-1.78	-1.81	-3.70	-6.25	-7.22	-6.25	18.50
30	33.08	2.73	-0.48	-1.30	-0.94	-3.74	-5.85	-6.91	-5.68	16.20
31	34.79	1.84	-0.70	-0.31	-1.33	-4.01	-5.28	-5.66	-4.55	20.32
32	4.56	0.53	0.38	-0.17	-1.10	-2.80	-4.58	-6.22	-4.64	17.58
33	7.79	3.18	0.09	1.62	-0.65	-2.39	-4.72	-5.39	-4.27	13.61
34	23.61	3.56	2.00	10.50	-0.58	-1.22	-4.07	-4.88	-3.28	14.20
35	37.53	4.13	1.11	22.49	-0.74	0.47	-4.11	-4.01	-1.92	10.93
36	56.04	1.87	1.46	0.00	-0.35	8.11	-3.34	-4.00	-0.69	14.34
37	82.75	7.16	2.85	0.00	1.11	18.20	-2.81	-2.73	-2.37	16.35
38	98.21	0.00	12.58	0.00	3.04	0.00	-2.76	-2.31	0.93	8.70
39	70.17	104.50	71.23	0.00	19.03	0.00	-0.49	-0.60	-4.83	11.06
40	81.99	104.58	93.00	0.00	54.64	0.00	-5.71	-3.56	-5.70	10.03
41	0.00	0.00	0.00	0.00	0.00	0.00	-6.50	-6.26	0.92	46.93
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	33.71
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-5.82	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENHANCED INLET, STATION 6

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	0.00	0.00	0.00	-8.95	13.62	24.52	13.60	7.59	2.61	
3	90.60	0.00	4.73	-27.76	10.97	11.09	10.24	4.50	2.33	
4	31.19	44.92	10.46	-3.29	18.07	11.05	9.19	3.51	-0.72	
5	50.92	23.44	8.04	-3.02	8.05	8.82	6.35	4.33	-4.32	
6	24.67	27.26	2.59	2.77	7.58	9.01	7.22	4.40	-1.98	
7	-1.61	17.94	7.01	6.48	8.71	7.48	6.40	3.94	1.33	
8	13.61	23.64	5.76	4.70	11.58	8.60	7.04	3.37	-1.43	
9	99.27	22.09	6.01	7.78	8.65	9.52	7.63	4.71	-0.90	
10	19.60	22.40	8.12	5.56	10.03	6.51	6.66	4.28	-1.44	
11	41.39	19.45	4.72	6.94	8.30	6.46	6.73	4.22	-3.26	
12	49.50	21.91	7.00	6.52	9.02	7.25	7.37	4.80	-1.04	
13	6.71	18.42	7.89	5.96	7.64	7.15	5.95	4.56	-0.04	
14	84.32	17.48	7.18	7.39	8.47	7.13	6.04	3.68	-0.43	
15	15.36	18.14	7.39	7.01	9.21	7.15	6.43	3.34	-0.16	
16	54.71	15.38	7.57	6.46	8.07	5.44	6.00	5.00	0.97	
17	31.07	15.41	7.73	6.98	8.48	5.49	5.64	3.97	0.75	
18	32.69	13.42	8.06	5.47	8.61	5.30	5.79	4.55	1.27	
19	39.48	12.95	6.96	5.96	7.87	5.71	5.53	4.44	0.92	
20	47.95	13.47	6.83	5.89	7.85	4.99	5.13	3.70	0.32	
21	16.49	11.73	6.81	6.30	7.64	5.76	5.21	3.96	2.28	
22	22.99	10.43	5.84	6.08	7.40	5.28	4.81	4.22	1.71	
23	31.44	10.47	5.76	5.81	8.02	4.66	5.45	3.96	0.82	
24	48.72	9.99	6.24	6.72	7.30	5.25	4.66	4.32	2.61	
25	32.81	12.21	5.32	6.05	7.72	4.44	4.91	3.72	1.79	
26	46.13	10.64	5.48	5.84	7.30	4.10	4.61	3.77	2.26	
27	47.38	9.57	5.78	5.60	6.46	3.87	4.45	3.33	1.89	
28	35.55	8.28	5.43	6.11	6.89	3.48	4.05	3.10	1.66	
29	31.01	8.80	5.16	5.58	6.48	3.77	4.27	3.46	1.42	
30	51.27	6.52	5.64	4.62	5.67	3.87	3.42	3.34	1.98	
31	33.18	7.39	4.68	6.22	6.08	2.93	3.99	3.94	1.00	
32	47.63	7.55	5.34	4.55	5.88	2.62	4.00	3.00	1.59	
33	0.00	6.39	4.04	5.08	5.46	2.56	3.98	3.64	1.09	
34	63.27	25.31	3.43	3.83	4.65	2.78	3.80	3.02	1.46	
35	117.00	45.45	3.71	4.27	4.63	2.62	3.58	3.08	1.44	
36	92.33	11.82	4.32	4.53	5.24	2.46	3.15	3.31	2.06	
37	87.72	7.81	3.17	4.96	5.45	1.74	3.59	2.95	1.44	
38	0.00	7.13	4.07	4.35	4.58	2.49	2.95	3.50	2.44	
39	114.74	6.23	5.20	3.52	4.57	2.34	3.80	3.47	2.74	
40	113.51	6.94	4.72	9.89	7.27	4.01	5.46	4.72	2.96	
41	0.00	33.21	19.99	2.29	-17.38	-40.24	12.77	11.38	2.28	
42	0.00	61.86	0.00	-30.46	1.83	-33.83	61.41	69.85	3.49	
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

TABLE A4.—Concluded.

ENHANCED INLET, STATION 7

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	233.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	40.55	44.12	0.00	46.63	33.99	25.47	23.44	16.65	0.00
4	0.00	245.13	17.80	20.93	34.59	26.03	28.50	26.33	18.14	0.00
5	0.00	224.33	25.72	1.58	-6.55	25.53	26.58	25.15	15.97	0.00
6	0.00	253.79	232.64	97.46	34.92	23.61	29.76	20.90	21.25	0.00
7	0.00	243.20	0.00	132.85	31.87	16.63	24.82	16.14	17.93	0.00
8	0.00	234.16	0.00	130.98	25.90	22.70	23.73	20.86	12.97	0.00
9	0.00	245.12	20.38	18.01	23.20	22.66	24.95	18.17	14.24	0.00
10	0.00	50.70	18.30	24.83	38.32	23.64	23.57	18.73	15.89	0.00
11	0.00	19.78	37.87	26.12	18.85	22.64	23.12	18.11	14.09	56.89
12	0.00	0.00	20.42	19.13	22.74	20.96	21.21	16.77	13.21	0.00
13	0.00	0.00	27.55	20.96	18.57	21.85	20.13	17.74	13.79	0.00
14	0.00	0.00	16.66	16.07	20.03	19.75	20.22	16.45	10.89	0.00
15	0.00	0.00	23.84	19.93	20.27	20.09	20.09	16.72	15.18	0.00
16	0.00	33.20	19.89	16.32	16.97	18.54	18.41	15.25	12.65	0.00
17	0.00	0.00	21.20	17.30	17.62	18.92	17.95	15.27	11.00	0.00
18	61.57	0.00	29.90	22.65	19.44	17.50	17.60	14.76	10.70	26.08
19	0.00	-18.79	21.35	17.67	17.94	17.49	16.57	14.38	11.36	0.00
20	0.00	1.14	20.21	17.27	18.35	17.76	16.53	14.19	11.30	42.33
21	0.00	32.55	19.07	15.36	15.63	15.55	15.48	13.24	8.89	30.71
22	0.00	0.00	17.33	14.59	15.72	15.19	15.20	12.55	9.94	38.76
23	0.00	0.00	15.75	13.56	15.22	14.44	14.82	10.28	8.54	24.67
24	0.00	175.68	15.91	13.97	15.84	14.04	13.22	11.67	7.27	0.00
25	0.00	0.00	17.46	13.69	13.74	13.78	13.08	11.29	8.60	0.00
26	0.00	0.00	15.29	12.64	13.82	12.48	12.76	10.93	8.15	25.55
27	0.00	27.37	17.00	13.40	13.51	12.00	11.57	9.78	7.41	0.00
28	0.00	32.04	15.83	12.57	12.98	11.30	11.07	9.10	7.92	0.00
29	0.00	168.59	15.18	12.37	13.28	10.76	10.98	10.33	7.25	0.00
30	0.00	0.00	12.56	10.31	11.73	10.83	10.25	8.26	5.78	35.42
31	0.00	17.80	14.34	11.26	11.77	9.99	9.56	8.06	6.29	0.00
32	0.00	24.92	12.13	9.99	11.41	9.52	9.22	7.74	5.91	32.79
33	0.00	22.67	11.82	9.22	10.15	8.77	8.55	7.04	4.40	0.00
34	0.00	27.94	11.06	8.54	9.58	8.63	8.00	8.17	4.89	0.00
35	0.00	0.00	11.59	9.10	10.00	8.62	7.39	7.00	5.90	36.58
36	179.15	0.00	12.29	9.17	9.50	7.30	7.34	6.48	4.77	0.00
37	88.72	19.27	11.38	8.33	8.63	7.60	7.08	6.42	4.82	0.00
38	0.00	0.00	8.78	6.52	7.60	6.82	6.98	5.87	6.06	28.38
39	0.00	34.48	8.56	6.40	7.53	6.14	5.99	5.69	4.03	0.00
40	0.00	30.10	7.83	6.14	7.64	5.99	5.56	5.92	4.73	0.00
41	0.00	170.19	7.63	6.12	7.77	4.62	5.41	4.98	3.72	22.35
42	116.57	88.42	7.00	4.43	5.06	5.43	4.44	5.22	3.24	21.40
43	0.00	152.88	9.20	5.62	5.20	4.90	4.17	6.57	3.03	18.63
44	0.00	144.79	234.72	182.96	143.20	4.29	4.43	5.59	4.94	42.58
45	119.91	150.69	232.54	214.34	198.89	18.57	6.60	8.59	4.54	35.42
46	119.30	0.00	0.00	0.00	198.78	185.17	5.26	18.54	5.78	72.91
47	120.71	182.54	0.00	0.00	0.00	0.00	-11.25	-8.78	-8.67	67.68
48	111.69	162.25	0.00	0.00	0.00	-1.96	-2.70	-4.51	-9.31	73.26
49	0.00	0.00	0.00	0.00	0.00	95.28	82.48	93.46	97.79	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENHANCED INLET, STATION 8

CP	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10-SECONDARY VEL
1	0.00	87.87	152.24	148.94	0.00	86.31	289.53	69.17	67.34	141.63
2	0.00	96.78	151.33	158.52	0.00	113.09	307.15	59.45	48.54	182.29
3	0.00	169.83	151.91	143.99	0.00	112.75	280.33	100.31	52.69	231.93
4	0.00	138.39	152.80	150.69	0.00	87.70	279.20	60.63	70.06	148.37
5	0.00	131.08	159.49	145.82	0.00	76.84	285.26	66.80	44.57	143.89
6	0.00	119.40	156.77	156.10	0.00	53.98	287.79	66.13	63.75	125.47
7	0.00	123.01	159.89	176.04	247.78	73.18	86.24	66.37	71.58	103.55
8	0.00	83.63	152.82	272.22	0.00	64.70	76.51	66.32	58.98	232.83
9	0.00	153.81	158.03	276.54	0.00	66.27	68.68	72.31	71.50	185.75
10	0.00	124.77	0.00	100.01	0.00	70.44	75.46	68.05	72.05	221.30
11	0.00	104.96	0.00	274.04	0.00	70.37	72.92	70.73	65.81	215.99
12	0.00	131.19	0.00	0.00	230.69	68.85	73.19	71.88	66.35	193.24
13	0.00	121.20	13.25	266.15	0.00	70.33	75.72	72.80	72.13	246.90
14	0.00	116.58	0.00	253.90	0.00	72.62	75.92	72.62	65.25	136.52
15	0.00	142.23	0.00	93.62	99.12	72.70	76.19	72.12	70.95	142.99
16	0.00	158.66	0.00	256.35	192.22	73.34	78.84	76.34	81.52	207.08
17	0.00	149.34	0.00	262.37	207.95	74.28	78.12	73.84	86.33	225.68
18	0.00	164.04	0.00	238.49	160.22	75.42	82.71	77.93	83.98	139.53
19	0.00	133.34	0.00	258.82	151.16	76.09	74.61	75.90	81.90	231.88
20	0.00	150.48	47.25	258.49	110.65	77.28	76.19	77.73	81.56	125.57
21	0.00	169.01	0.00	0.00	140.77	75.41	75.16	77.57	86.65	134.79
22	0.00	140.35	0.00	262.51	247.47	76.83	75.35	76.70	80.94	222.66
23	0.00	105.81	0.00	249.76	0.00	76.25	76.55	79.54	90.70	129.52
24	0.00	129.40	0.00	110.25	0.00	77.65	76.60	78.28	85.74	125.61
25	0.00	172.35	50.67	265.99	203.87	75.84	80.36	77.66	85.61	214.04
26	0.00	144.58	0.00	79.55	153.86	78.42	80.68	78.28	90.48	215.74
27	0.00	133.95	0.00	254.83	99.51	78.53	80.78	80.01	82.63	122.92
28	0.00	142.62	89.54	264.76	0.00	78.98	79.96	78.91	90.22	225.32
29	0.00	147.98	36.46	76.93	179.53	77.83	81.00	79.00	86.93	136.27
30	0.00	158.74	0.00	67.61	0.00	78.26	81.47	78.95	94.20	133.91
31	0.00	144.34	0.00	32.98	197.29	79.07	81.36	78.62	86.90	142.83
32	0.00	130.30	0.00	115.46	228.61	78.93	81.15	79.89	89.29	128.61
33	0.00	130.12	0.00	78.16	165.36	79.54	82.29	78.76	91.51	230.84
34	0.00	159.18	0.00	79.54	167.44	79.97	81.69	80.22	88.83	236.15
35	0.00	137.35	36.18	248.31	153.83	78.02	81.35	80.33	88.59	128.80
36	0.00	147.37	112.76	74.29	0.00	77.49	81.87	80.60	89.04	220.19
37	0.00	155.48	120.60	95.79	0.00	78.61	81.40	80.58	86.01	129.35
38	0.00	151.48	143.46	80.06	0.00	80.61	81.87	80.02	91.96	131.92
39	0.00	145.81	158.25	236.28	163.70	80.21	82.26	78.89	91.48	127.14
40	0.00	166.73	157.05	262.76	165.08	80.43	82.42	80.07	88.99	142.47
41	0.00	149.34	164.29	250.71	167.20	79.55	82.17	80.54	88.06	134.72
42	174.85	151.02	165.84	257.45	126.36	80.33	82.28	80.39	92.31	214.57
43	175.40	163.55	167.35	252.56	172.17	80.72	82.92	80.24	85.02	146.16
44	175.46	157.76	47.93	84.51	170.65	80.67	83.04	80.03	87.06	142.42
45	0.00	156.09	42.67	85.44	186.20	81.63	83.69	79.85	87.98	142.92
46	0.00	166.00	0.00	92.41	172.66	83.29	83.32	79.30	85.98	140.71
47	167.61	165.68	241.78	266.64	172.14	82.10	81.80	75.54	86.80	227.59
48	168.82	170.58	149.41	272.72	168.73	76.33	76.07	69.52	82.41	119.63
49	165.46	161.04	151.55	279.08	186.05	72.63	73.93	66.56	76.60	128.81
50	170.22	198.28	149.47	203.03	0.00	68.59	84.82	62.05	65.58	124.53

TABLE A5.—FLOW-GRID DEVIATION ANGLES

(degree)

BASELINE INLET, STATION 1

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	15.02	12.05	13.12	14.51	13.19	14.04	11.24	12.49	12.68	12.14
2	15.10	12.08	13.33	14.06	13.04	13.86	11.37	12.59	12.95	15.23
3	15.67	11.84	13.19	14.24	13.07	13.84	11.37	12.75	12.48	12.85
4	15.47	12.13	13.45	14.19	13.32	13.67	11.37	12.84	12.44	14.77
5	14.84	11.92	13.34	14.30	13.44	13.79	11.25	12.64	12.65	10.22
6	14.89	12.20	13.42	14.38	13.42	13.72	11.47	12.56	12.82	11.50
7	15.24	11.99	13.25	14.06	13.19	13.99	11.28	12.70	12.48	12.07
8	15.18	11.94	13.08	14.44	13.31	13.80	11.21	12.67	12.50	13.70
9	15.41	12.14	12.97	14.09	13.36	13.91	11.38	12.57	12.75	12.43
10	14.96	11.97	13.49	14.37	13.35	13.80	11.18	12.49	12.64	9.42
11	15.57	12.13	13.57	14.38	13.54	13.69	11.26	12.75	12.98	19.37
12	15.18	12.11	13.40	14.52	13.37	13.79	11.24	12.44	12.87	11.52
13	15.53	11.86	13.13	14.33	13.25	13.92	11.26	12.63	12.73	10.31
14	15.71	12.17	13.54	14.37	13.32	13.87	11.14	12.51	12.88	16.58
15	15.40	12.11	13.58	14.29	13.03	13.84	11.34	12.81	12.75	11.47
16	15.49	12.17	13.03	14.09	13.25	13.99	11.23	12.77	12.66	12.64
17	15.53	12.14	13.18	14.59	13.47	13.95	11.13	12.75	12.69	13.12
18	15.46	12.20	13.19	14.22	13.20	13.97	11.23	12.69	12.98	13.23
19	15.64	12.38	13.28	14.23	13.03	13.80	11.28	12.61	12.90	14.90
20	15.53	12.07	13.39	14.26	13.40	13.73	11.34	12.59	12.64	14.99
21	15.76	11.95	13.38	14.45	13.24	13.77	11.33	12.71	12.60	11.62
22	15.27	12.14	13.38	14.44	13.21	13.92	11.22	12.68	12.79	14.20
23	15.27	12.18	13.06	14.27	13.17	14.01	11.32	12.63	12.74	12.69
24	15.65	12.17	13.39	14.30	13.36	13.80	11.31	12.68	12.82	18.53
25	15.75	12.04	13.13	14.51	12.99	13.91	11.31	12.65	12.86	14.62
26	15.07	12.00	13.44	14.40	12.96	13.77	11.32	12.68	12.64	11.97
27	15.37	12.09	13.30	14.02	13.38	13.79	11.41	12.52	12.74	17.42
28	15.36	12.21	13.20	14.31	13.35	13.75	11.28	12.49	12.97	13.06
29	15.65	11.94	13.37	14.31	13.25	13.87	11.39	12.91	12.70	14.20
30	15.18	12.07	13.15	14.20	13.63	13.91	11.38	12.64	12.56	13.49
31	15.55	12.21	13.03	14.26	13.26	13.95	11.31	12.73	12.67	14.53
32	15.09	12.00	13.26	14.36	13.09	14.00	11.21	12.78	12.70	13.76
33	15.18	12.00	13.23	14.13	13.25	13.90	11.27	12.65	12.67	12.95
34	14.96	11.84	13.04	14.24	13.28	13.84	11.23	12.67	12.81	12.21
35	15.57	12.05	13.42	14.13	13.50	13.97	11.24	12.76	12.96	15.99
36	15.69	12.07	13.53	14.04	13.31	13.93	11.38	12.61	12.64	15.06
37	15.63	11.99	13.24	14.24	13.02	13.92	11.60	12.80	12.70	13.52
38	15.38	12.04	13.17	14.43	13.06	13.99	11.27	12.57	12.55	13.12
39	15.61	11.77	13.18	14.36	13.35	13.86	11.32	12.67	12.76	11.78
40	15.18	12.06	13.17	14.26	13.46	13.93	11.41	12.63	12.97	16.30
41	15.22	12.24	13.34	14.44	13.05	13.91	11.42	12.55	13.02	13.91
42	15.36	11.91	13.31	14.03	13.19	14.02	11.29	12.61	13.27	12.10
43	14.96	12.16	13.23	14.48	13.32	13.81	11.58	12.97	12.87	12.36
44	15.35	12.01	13.23	14.60	13.12	14.03	11.34	12.55	13.14	15.30
45	15.46	12.23	13.19	14.43	13.47	13.79	11.33	12.79	12.99	11.48
46	15.61	12.09	13.25	14.22	13.20	13.94	11.45	12.71	13.02	12.06
47	15.42	12.01	13.66	14.41	13.09	13.79	11.50	12.62	12.76	8.10
48	15.50	12.02	13.24	14.28	13.23	13.85	11.28	12.58	12.71	7.49
49	15.24	11.95	13.27	14.27	13.13	13.85	11.21	12.48	12.88	16.36
50	16.36	12.56	13.63	13.93	14.12	14.06	12.17	13.35	12.16	19.33

BASELINE INLET, STATION 2

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	20.68	22.48	22.15	23.20	22.45	17.31	23.24	23.44	21.54	18.26
2	18.11	21.83	21.09	21.87	21.88	20.45	20.56	22.37	23.14	22.55
3	16.22	19.86	20.02	19.67	21.02	21.08	18.45	20.25	22.45	17.95
4	13.44	18.24	18.55	20.11	19.26	21.10	17.36	17.93	21.06	19.54
5	12.13	16.52	17.39	18.38	18.74	19.99	15.35	16.46	18.63	21.66
6	11.04	15.46	16.11	17.34	17.73	18.27	14.03	15.31	17.27	19.52
7	10.38	14.46	13.80	17.17	16.65	17.92	12.04	13.69	16.59	16.17
8	9.66	13.15	13.91	14.87	15.60	16.66	11.59	13.12	15.46	17.92
9	9.06	12.04	12.83	12.19	14.99	15.60	10.51	11.66	14.19	14.00
10	8.44	11.36	12.16	13.58	13.79	15.09	10.54	11.34	13.64	21.39
11	8.42	11.14	11.03	12.52	13.14	14.49	9.84	11.03	13.19	10.46
12	8.34	10.70	11.08	11.87	12.27	13.90	8.32	9.73	12.46	17.59
13	8.41	10.23	11.63	12.42	11.57	13.10	7.84	8.62	13.02	16.42
14	8.56	10.12	9.12	9.98	11.16	12.27	7.99	8.72	11.96	14.36
15	8.50	8.98	9.90	9.97	10.50	12.09	7.27	8.60	10.14	12.93
16	8.16	9.42	8.47	9.15	10.23	11.90	8.10	8.04	9.47	10.89
17	8.54	9.70	8.04	9.91	9.75	11.25	7.52	7.41	8.83	16.11
18	8.44	9.26	6.86	10.07	9.53	10.61	6.44	6.98	10.00	8.43
19	8.56	9.39	7.12	8.50	8.92	10.52	5.83	6.70	7.90	9.98
20	8.58	8.99	6.98	8.26	8.15	10.21	6.15	6.53	8.53	8.43
21	8.75	8.62	7.40	6.69	8.15	9.79	6.01	6.09	7.41	13.95
22	8.92	8.62	5.70	7.71	7.88	9.83	5.47	6.54	7.75	11.34
23	8.89	8.91	7.25	8.50	7.75	9.30	6.15	5.83	7.20	13.79
24	9.02	8.55	6.07	7.71	7.67	9.38	6.09	5.64	6.88	16.22
25	8.99	8.42	5.84	7.10	7.30	9.07	5.52	5.48	6.14	11.35
26	9.01	9.08	6.79	7.67	7.35	8.81	5.98	6.36	7.14	12.14
27	9.01	9.11	6.50	8.21	7.44	8.53	5.64	5.49	6.86	10.53
28	9.62	8.89	7.03	4.91	7.26	8.52	5.33	5.46	6.43	12.86
29	9.43	8.47	7.05	8.28	7.16	8.46	5.50	6.13	6.80	13.27
30	9.56	9.01	6.25	7.73	6.99	8.56	5.96	5.55	5.73	8.14
31	9.96	9.09	7.30	8.66	6.91	8.11	6.01	6.16	6.26	11.98
32	11.34	10.80	6.85	7.80	8.02	8.93	6.44	7.65	7.68	9.98
33	10.07	9.97	7.22	10.04	7.04	7.99	6.00	5.93	5.85	2.72
34	10.38	10.20	7.34	6.75	6.84	8.00	5.94	5.78	6.20	11.52
35	10.47	10.28	7.39	6.87	6.68	7.84	6.07	6.79	6.26	10.45
36	11.09	11.18	8.40	8.75	7.14	8.36	5.85	6.27	6.14	13.65
37	11.56	10.92	7.48	9.50	7.11	8.21	6.55	5.97	6.78	13.19
38	11.99	11.19	8.20	9.14	7.31	8.17	6.60	6.46	7.10	10.17
39	12.40	10.97	8.80	9.77	7.60	7.99	6.38	7.54	6.58	15.69
40	13.15	12.65	9.71	12.36	7.76	8.37	7.21	7.08	7.15	10.05
41	14.13	12.62	9.57	9.96	8.17	8.46	7.24	7.06	7.72	13.84
42	14.51	12.97	10.07	9.19	8.63	8.68	7.72	7.42	7.34	12.08
43	15.64	13.47	11.25	12.27	9.06	8.99	8.34	8.18	9.03	13.69
44	16.94	14.70	11.40	12.16	9.86	9.30	8.50	8.49	8.01	12.77
45	19.14	16.43	12.16	12.14	10.51	9.56	9.03	9.06	8.91	13.70
46	21.42	16.95	16.25	14.65	11.35	10.13	9.93	9.57	9.39	11.78
47	23.89	19.71	17.85	16.77	12.71	10.57	12.02	11.20	9.85	14.39
48	25.16	23.30	20.60	20.77	14.73	11.56	14.08	11.93	11.43	13.81
49	24.92	24.13	22.44	22.48	17.31	12.66	17.48	14.86	12.91	13.60
50	22.83	23.09	22.38	25.29	20.75	14.59	21.20	19.49	16.92	20.16

TABLE A5.—Continued.

BASELINE INLET, STATION 3

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1		28.15	23.39	30.43	24.69	0.00	23.09	0.00	0.00	0.00
2		0.00	24.84	29.93	0.00	0.00	23.09	0.00	20.62	17.43
3		26.28	-25.01	19.27	-0.54	15.26	17.83	23.46	19.04	23.51
4		0.00	0.00	21.52	-8.91	-51.50	-20.62	-0.28	18.38	26.38
5		0.00	0.00	0.00	0.00	0.00	0.00	1.73	2.90	26.51
6		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.53
7		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8		3.55	0.00	0.00	12.66	11.68	6.76	0.00	0.00	0.00
9		0.00	11.97	7.20	12.12	12.51	6.01	6.29	13.67	0.00
10		2.55	9.38	8.47	8.38	8.15	5.70	6.91	15.61	0.00
11		2.15	5.28	6.64	6.88	7.67	5.93	7.10	10.05	9.44
12		2.89	4.28	7.70	7.43	6.87	4.74	6.18	13.13	11.69
13		3.02	5.67	6.86	10.75	7.37	5.47	6.52	12.82	11.43
14		15.08	7.77	10.36	9.61	6.68	5.14	6.02	13.91	11.08
15		2.63	8.16	4.95	6.73	6.89	5.15	6.30	8.82	8.27
16		2.39	2.87	4.67	6.65	6.99	4.44	5.81	12.07	12.38
17		6.13	3.24	5.71	6.56	6.58	4.80	5.70	12.23	16.16
18		4.52	5.03	5.17	4.70	6.24	5.11	5.89	11.02	7.88
19		27.68	4.21	4.72	6.03	6.20	5.09	5.55	9.88	6.87
20		3.66	3.77	5.50	5.17	5.79	5.06	5.51	9.75	2.44
21		3.03	5.38	5.31	6.19	6.07	4.88	5.91	8.41	1.52
22		3.03	8.81	4.77	5.20	5.64	5.28	5.56	6.62	3.04
23		4.28	3.38	4.70	6.16	5.97	5.16	5.40	7.62	3.25
24		8.17	11.12	4.83	6.59	6.09	5.52	5.75	10.66	4.85
25		5.96	5.33	6.54	5.76	6.08	5.37	6.16	11.17	6.95
26		5.46	9.63	6.04	4.82	6.25	5.73	6.26	10.17	10.12
27		5.43	4.82	5.84	5.87	5.99	5.28	6.40	11.50	11.16
28		6.21	7.13	5.27	6.23	6.56	6.60	6.78	12.32	9.67
29		8.16	7.33	6.66	5.09	6.72	5.58	6.56	10.07	10.79
30		10.29	7.92	6.59	6.04	6.64	6.36	6.46	13.91	12.05
31		8.58	8.87	7.44	5.91	6.86	6.21	6.88	10.79	8.90
32		13.47	7.90	7.34	7.44	7.42	7.18	7.22	8.78	12.43
33		8.27	8.48	7.36	5.67	7.26	6.78	7.23	11.02	12.44
34		8.45	8.42	8.10	8.30	7.44	6.96	7.49	10.54	17.53
35		10.39	8.31	8.32	7.79	7.55	7.33	7.62	10.27	16.01
36		10.32	10.98	8.40	7.41	7.74	7.38	7.66	13.06	13.91
37		12.24	10.91	9.52	7.52	7.93	7.69	7.97	12.08	10.86
38		12.04	9.48	9.71	8.76	8.27	8.34	8.38	11.88	17.96
39		11.54	10.19	9.96	8.27	8.30	8.19	8.63	13.46	10.42
40		10.27	10.16	9.99	9.28	9.04	9.10	8.71	8.56	11.00
41		11.97	11.48	10.65	8.83	9.29	8.58	9.17	12.04	14.73
42		14.15	10.84	11.49	9.86	9.47	9.04	9.36	10.06	13.04
43		14.14	11.09	12.26	9.02	9.90	9.20	9.53	12.94	12.10
44		11.64	11.88	11.31	9.77	9.90	9.04	9.33	11.51	17.92
45		11.39	12.60	11.06	9.85	10.05	8.29	9.21	14.00	12.27
46		9.34	11.99	11.87	10.64	9.90	7.71	8.77	11.92	12.97
47		0.00	22.91	10.40	10.82	8.56	6.39	7.77	11.35	21.16
48		0.00	20.79	0.00	0.00	10.42	6.37	6.92	12.77	11.47
49		0.00	0.00	0.00	0.00	0.00	59.91	62.50	68.58	0.00
50		76.69	78.13	0.00	0.00	0.00	75.15	61.74	0.00	0.00

BASELINE INLET, STATION 4

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	0.00	0.00	0.00	0.00	0.00	-0.61	-1.13	0.06	-2.48	8.43
2	0.00	0.00	0.00	2.46	-2.57	2.69	-0.48	0.28	-3.40	3.79
3	0.00	0.00	3.09	2.52	-2.17	-0.91	0.30	0.15	-0.65	-6.19
4	21.90	0.83	-0.46	2.44	-1.04	0.93	0.48	1.44	2.24	-9.68
5	7.44	0.85	0.30	0.47	-0.56	0.43	0.08	0.87	-1.26	-1.02
6	14.80	2.01	2.76	1.60	0.21	2.50	2.95	1.67	0.56	-0.42
7	8.87	1.08	1.29	1.38	1.03	0.46	1.26	1.42	0.75	4.99
8	19.51	1.19	1.44	1.24	1.31	1.11	0.92	0.80	1.41	2.56
9	19.49	2.24	1.51	0.99	1.22	1.14	1.43	1.28	1.59	3.46
10	9.60	1.82	1.77	1.51	1.74	1.67	1.65	1.66	2.01	3.96
11	9.15	2.30	1.60	1.95	1.87	1.50	2.00	2.27	2.32	2.79
12	5.51	2.75	2.36	1.56	1.72	1.59	1.80	2.38	2.66	-0.04
13	12.94	3.10	1.68	1.76	1.92	1.76	1.77	1.98	2.96	4.22
14	16.40	3.15	1.64	2.04	1.92	1.48	1.84	2.10	2.56	6.69
15	15.59	2.76	2.07	2.21	0.99	1.32	1.96	2.13	3.41	3.78
16	13.56	3.11	2.07	2.15	0.93	1.51	2.04	2.40	3.25	1.58
17	19.56	3.19	2.34	1.80	0.81	1.63	2.03	2.54	2.91	3.92
18	11.08	3.70	2.29	1.88	0.63	1.38	1.59	2.45	3.38	6.43
19	29.64	3.63	2.42	1.70	0.51	1.63	1.35	2.41	3.46	5.34
20	19.63	3.44	2.17	1.36	0.53	1.32	1.46	2.23	3.28	3.31
21	13.52	3.29	1.94	1.66	0.31	0.74	1.36	2.15	3.21	6.33
22	17.01	3.46	1.96	1.58	0.13	0.44	1.22	1.89	3.09	5.36
23	12.11	3.31	1.63	1.25	-0.03	0.35	0.73	1.86	3.00	4.49
24	14.48	3.04	1.61	1.28	0.05	0.09	0.50	1.53	2.88	6.48
25	12.98	1.93	1.68	0.95	-0.23	-0.27	0.49	1.13	2.50	6.08
26	9.90	2.02	1.50	0.87	0.31	-0.76	-0.16	0.91	2.05	1.73
27	0.00	1.49	1.07	0.59	5.82	-0.67	-0.58	0.56	1.71	2.49
28	0.00	0.78	1.09	0.37	0.00	-0.90	-0.33	0.39	1.45	1.59
29	33.04	0.93	1.27	0.77	0.00	-1.24	-0.48	0.27	0.95	1.46
30	0.00	0.77	1.47	0.23	0.00	-1.29	-0.86	0.12	0.46	4.35
31	29.88	0.99	1.54	0.57	0.00	-1.36	-0.79	-0.08	0.61	0.23
32	0.00	0.75	1.54	0.80	0.00	-1.23	-0.76	-0.35	-0.23	0.30
33	0.00	1.48	1.78	0.57	0.00	-1.63	-0.93	-0.32	0.00	1.81
34	0.00	15.66	3.12	0.36	0.00	-1.53	-1.41	-0.25	-0.13	2.00
35	0.00	37.27	1.58	7.13	0.00	-1.90	-0.45	-0.78	0.32	2.34
36	0.00	0.00	0.00	0.00	0.00	-2.22	2.66	-0.17	0.29	-0.85
37	0.00	0.00	0.00	0.00	0.00	-1.64	-1.34	-0.09	0.55	-0.75
38	0.00	0.00	0.00	0.00	0.00	0.10	0.00	1.71	1.20	-0.73
39	0.00	0.00	0.00	0.00	0.00	-2.56	0.00	0.00	16.98	4.31
40	0.00	0.00	0.00	0.00	-1.14	0.00	0.00	0.00	17.22	0.00
41	0.00	0.00	0.00	0.00	4.31	0.00	0.00	0.00	0.00	0.00
42	0.00	0.00	0.00	0.00	2.48	0.00	0.00	0.00	0.00	0.00
43	0.00	0.00	0.00	0.00	3.17	6.47	7.37	18.69	30.09	26.10
44	0.00	0.00	0.00	0.00	8.62	26.31	17.42	24.42	30.82	24.33
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-48.67	13.87
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A5.—Continued.

BASELINE INLET, STATION 5

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-5.65	-12.61	0.00
2	0.00	0.00	0.00	0.00	-2.08	-4.20	-3.29	-3.04	0.75	-6.51
3	0.00	0.00	22.27	-3.98	-3.84	-11.18	-3.10	-5.45	-5.68	-0.36
4	0.26	1.23	-0.53	-2.56	-2.64	-5.67	-3.22	-4.50	-9.75	-8.09
5	0.65	1.45	-0.38	-2.47	-4.76	-6.03	-4.99	-3.45	-6.37	0.58
6	-3.10	1.61	-0.41	-2.69	-2.75	-6.55	-3.31	-5.12	-7.73	-2.95
7	-2.03	1.94	0.20	-1.82	-1.87	-5.19	-3.24	-4.59	-7.77	-0.98
8	-0.54	2.03	0.17	-1.97	-3.16	-4.75	-3.96	-5.17	-3.84	7.41
9	-2.65	1.94	0.12	-1.97	-2.15	-5.27	-4.35	-4.69	-6.45	3.82
10	-1.09	1.98	-0.06	-2.37	-3.87	-5.07	-4.04	-5.28	-4.81	4.07
11	-0.75	2.02	0.08	-2.13	-3.20	-4.78	-4.32	-5.06	-6.17	-4.39
12	0.22	2.18	0.17	-2.11	-3.08	-5.33	-4.58	-4.98	-4.06	-4.88
13	-2.86	1.74	-0.29	-2.60	-2.70	-5.74	-4.99	-4.72	-6.00	2.34
14	-1.25	1.56	-0.15	-2.15	-3.00	-5.76	-4.50	-5.12	-5.87	4.61
15	-0.75	1.27	-0.20	-1.96	-3.23	-5.35	-4.42	-5.41	-5.59	4.14
16	-0.60	0.72	-0.76	-2.54	-3.79	-4.70	-5.09	-5.26	-5.58	0.62
17	-0.76	0.10	-0.94	-2.31	-3.30	-5.52	-4.54	-5.74	-5.78	3.03
18	0.10	0.29	-0.60	-1.81	-3.41	-5.53	-4.57	-5.05	-5.12	1.37
19	-0.91	0.27	-0.79	-2.17	-3.83	-5.35	-4.91	-5.34	-4.90	3.46
20	-0.20	0.06	-0.87	-2.12	-3.57	-5.43	-4.72	-4.73	-5.11	4.96
21	-0.76	-0.39	-1.01	-1.99	-3.13	-5.42	-4.84	-5.03	-4.34	5.68
22	0.00	-0.50	-1.00	-1.86	-3.10	-5.56	-4.69	-4.80	-4.69	-1.83
23	0.55	-0.17	-0.66	-1.49	-2.95	-5.35	-4.77	-4.79	-5.01	1.07
24	0.40	-0.04	-0.50	-1.31	-3.16	-5.37	-4.44	-4.79	-4.64	8.48
25	0.66	-0.54	-0.76	-1.35	-2.81	-5.11	-4.19	-4.77	-4.63	4.81
26	0.27	-0.29	-0.64	-1.37	-2.83	-5.12	-4.38	-4.55	-4.24	5.96
27	0.71	-0.29	-0.53	-1.15	-3.00	-4.72	-4.46	-4.45	-3.55	10.23
28	1.17	-0.68	-0.60	-0.92	-2.37	-4.88	-4.07	-4.23	-3.87	3.75
29	1.57	-0.02	-0.25	-0.84	-2.13	-4.54	-3.74	-4.32	-2.86	8.27
30	1.03	-0.68	-0.48	-0.70	-1.87	-4.62	-3.65	-3.95	-3.83	-0.87
31	1.55	-0.20	0.00	-0.63	-1.99	-4.70	-3.15	-3.75	-3.72	3.50
32	1.36	0.92	0.00	-0.85	-1.69	-4.34	-2.85	-3.21	-2.89	8.03
33	1.92	-0.47	0.00	-0.42	-1.93	-3.91	-3.19	-3.18	-2.78	-0.53
34	7.10	2.07	0.00	0.26	-1.50	-3.61	-2.97	-2.94	-2.28	3.04
35	14.87	0.00	0.00	0.72	-1.48	-3.46	-2.47	-2.45	-1.95	0.15
36	20.84	3.85	0.00	3.04	0.64	-3.32	-1.98	-2.28	-1.81	2.02
37	31.62	-1.72	0.00	7.10	7.73	-2.88	-1.29	-2.13	-2.33	5.90
38	0.00	-2.56	0.00	0.11	-0.42	-2.98	0.00	-1.78	-1.08	11.38
39	0.00	-3.91	0.00	11.94	30.37	-4.32	0.56	-3.43	11.79	12.95
40	0.00	-3.94	0.00	0.00	0.00	-4.62	0.00	0.00	0.00	14.87
41	0.00	0.00	0.00	0.00	0.00	-5.25	0.00	0.00	24.09	28.47
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	29.67	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	34.26	21.53	28.40	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

BASELINE INLET, STATION 6

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	-0.63	-2.93	-1.97	-1.36	-1.51	1.73	4.60
3	-3.23	4.36	1.12	-1.37	-2.59	-2.11	-0.24	-2.74	-6.44	7.45
4	-1.23	4.81	1.03	-0.78	-3.48	-2.74	-0.73	-2.12	6.35	2.59
5	1.43	5.20	1.22	-0.97	-2.14	-0.97	-0.93	-1.46	11.61	0.84
6	1.57	5.63	1.31	-0.96	-3.14	0.04	-0.20	-1.50	6.85	4.00
7	0.09	4.92	1.29	-0.56	-1.67	-1.36	-0.37	-0.85	6.37	6.67
8	-1.15	5.50	1.25	-0.69	-2.51	-1.71	-0.07	-1.07	3.81	2.48
9	0.87	4.86	1.23	-0.83	-1.93	-0.39	-0.41	-1.29	3.75	2.06
10	0.74	3.90	0.98	-0.52	-2.02	-0.47	-0.61	-1.07	4.44	3.40
11	1.31	4.36	1.02	-0.92	-0.99	-0.06	-0.17	-1.35	3.46	5.01
12	0.99	3.93	1.19	-0.51	-1.86	-0.67	0.19	-0.71	0.60	8.59
13	1.34	3.58	1.21	-0.74	-1.35	-0.29	0.02	-0.62	-2.44	5.27
14	0.90	3.11	1.24	-0.39	-1.63	-0.01	-0.37	-0.96	0.35	1.50
15	0.76	3.05	1.00	-0.63	-0.71	0.13	0.01	-0.72	-2.39	4.28
16	1.15	2.36	1.14	0.01	-0.71	-0.66	-0.13	-0.81	0.96	0.32
17	2.38	2.76	0.57	0.25	-0.93	-0.22	0.10	-0.99	-0.55	4.81
18	1.53	3.16	1.00	-0.17	-0.96	-0.07	0.09	-0.38	0.06	5.74
19	1.81	1.84	1.47	0.01	-0.85	-0.09	-0.33	-0.47	1.30	0.96
20	2.20	2.32	1.07	-0.22	-0.34	-0.33	0.09	-0.66	1.84	1.26
21	1.95	1.87	0.72	-0.31	-0.49	-0.48	-0.01	-0.37	-0.26	0.97
22	2.30	2.25	1.40	0.02	-0.79	-0.42	-0.01	-0.53	-0.30	0.84
23	2.10	1.89	0.85	0.19	-0.55	0.02	0.02	-0.57	4.22	0.06
24	2.43	2.13	1.44	-0.36	-0.21	-0.28	-0.27	-0.85	0.99	-0.46
25	2.80	2.28	0.79	-0.08	-0.86	-0.23	-0.13	-0.51	0.44	0.22
26	3.01	1.99	1.08	0.24	-0.44	-0.04	-0.34	-0.81	2.58	1.61
27	4.67	4.60	1.58	0.44	-0.19	0.53	-0.11	-0.39	1.11	5.08
28	2.79	2.07	0.66	0.43	-0.23	-0.10	-0.32	-0.73	-0.54	-2.33
29	3.02	2.40	1.09	0.30	-0.47	0.05	-0.24	-0.53	0.99	0.26
30	3.66	3.03	1.06	0.41	-0.15	-0.29	-0.32	-0.74	-0.29	2.10
31	3.37	3.10	0.90	1.08	-0.62	-0.16	-0.45	-0.70	0.44	1.16
32	2.67	3.52	0.99	0.57	0.03	0.47	-0.77	-0.53	2.06	-0.25
33	8.05	4.78	0.81	0.46	0.06	-0.10	-0.46	-0.63	0.00	0.99
34	3.74	4.72	1.92	0.18	0.01	0.26	-0.43	-0.64	0.90	0.64
35	7.34	4.94	1.76	1.53	0.16	0.00	-0.44	-0.87	1.13	0.27
36	24.66	1.94	2.05	1.21	0.35	0.61	-0.51	-0.25	3.66	0.34
37	20.32	30.02	6.66	2.12	0.86	-3.03	-0.43	-0.05	2.58	1.43
38	36.99	0.00	6.18	2.38	-1.73	9.13	-0.30	0.38	6.28	1.73
39	34.19	0.00	-1.34	0.02	0.37	16.10	-1.18	-0.64	5.17	5.42
40	0.00	0.00	0.00	0.00	9.28	0.00	0.94	2.98	6.10	6.28
41	0.00	-1.22	0.00	-5.86	0.00	-10.26	8.50	-1.01	9.27	15.72
42	0.00	20.51	-13.28	-1.89	-6.03	1.21	24.26	30.42	7.44	23.42
43	0.00	25.72	-0.97	-10.73	-17.23	11.30	32.70	25.25	18.30	30.10
44	-12.64	20.78	6.50	-1.22	-16.16	8.60	14.80	13.15	17.33	29.51
45	0.00	0.00	0.00	0.00	0.00	-13.68	4.55	-4.47	20.69	23.73
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A5.—Continued.

BASELINE INLET, STATION 7

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	15.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	68.69	14.80	6.24	2.27	1.90	1.75	3.62	10.09	9.54	0.00
4	57.87	15.57	7.26	3.54	2.33	3.49	5.32	6.61	9.10	11.76
5	67.71	12.09	7.20	4.39	2.92	5.23	4.22	7.13	4.06	12.06
6	57.62	14.03	7.00	4.46	2.80	4.95	4.24	6.53	4.60	12.02
7	54.93	13.35	7.17	3.97	3.35	4.23	5.22	5.06	5.46	10.71
8	63.53	13.09	7.01	4.34	2.89	5.34	5.20	6.22	4.19	11.26
9	64.80	10.67	6.85	3.90	3.62	4.25	5.06	5.61	4.73	8.17
10	47.14	10.18	6.44	4.96	4.00	4.28	5.28	6.55	4.93	8.93
11	50.68	9.59	6.30	3.95	3.76	3.59	5.49	5.74	5.64	10.21
12	32.91	9.27	6.46	3.63	3.17	4.26	5.05	5.76	5.36	6.91
13	25.46	9.12	5.97	4.35	3.64	4.76	4.60	5.88	4.49	9.14
14	61.49	8.42	5.62	3.57	3.09	4.63	4.89	5.75	3.67	6.71
15	39.92	8.51	5.98	3.57	3.75	3.75	5.07	5.07	3.72	8.34
16	30.01	7.74	5.31	3.83	4.09	4.48	4.81	5.25	4.12	7.36
17	44.46	7.90	5.34	4.08	3.73	4.49	5.03	5.12	4.09	4.89
18	50.61	7.71	5.25	3.87	3.55	4.02	4.43	4.69	4.13	7.17
19	23.07	7.41	4.99	3.58	3.65	4.28	4.72	4.61	4.37	5.90
20	9.99	13.36	5.57	4.24	3.81	4.21	4.74	5.33	6.05	9.53
21	9.12	6.82	5.45	3.38	3.23	4.13	3.93	4.70	3.90	8.85
22	8.76	6.47	4.53	3.07	3.32	3.93	4.06	4.55	3.85	5.56
23	8.80	6.52	4.21	2.75	2.96	3.62	4.22	4.22	3.97	4.29
24	8.88	6.61	4.40	3.23	3.07	3.71	3.71	4.21	4.06	4.20
25	8.43	6.17	4.27	3.16	2.98	3.45	3.33	4.14	3.54	5.57
26	7.83	5.58	4.29	3.06	3.07	3.17	3.53	3.90	3.56	4.43
27	8.21	5.97	3.57	2.74	2.52	3.17	3.47	3.93	3.56	3.82
28	7.90	5.67	3.73	2.67	2.65	2.95	3.26	3.17	3.06	2.31
29	34.10	5.69	3.96	1.88	2.47	3.28	2.66	3.35	3.00	3.38
30	33.80	5.18	3.08	2.53	2.24	2.85	2.36	3.24	2.78	3.53
31	56.05	5.31	3.02	2.28	2.19	2.60	2.75	3.02	2.63	1.53
32	39.09	4.82	3.04	1.98	1.90	2.49	2.46	3.26	2.95	3.77
33	23.76	5.15	2.80	1.52	1.90	2.22	2.43	3.06	2.63	4.10
34	42.89	5.08	2.68	1.63	1.74	1.94	2.07	2.83	2.75	2.37
35	56.42	4.73	2.48	1.57	1.70	2.01	1.89	2.56	2.56	5.18
36	55.31	4.23	2.70	1.44	1.91	1.88	1.91	2.69	2.34	4.36
37	55.17	4.46	1.95	1.61	1.43	1.99	1.68	2.60	2.15	3.39
38	47.80	3.58	2.07	1.68	1.12	1.88	1.65	2.19	1.60	3.24
39	55.66	3.52	1.50	1.58	1.48	1.63	1.37	2.47	2.44	3.92
40	52.74	3.74	1.17	1.27	0.82	1.73	1.52	2.07	1.88	4.38
41	53.07	5.13	1.50	0.03	1.04	2.05	1.83	1.46	2.24	4.79
42	49.42	12.32	0.99	0.74	1.63	0.91	1.11	1.72	3.21	4.09
43	48.96	23.28	-0.04	1.27	1.68	1.96	2.30	5.34	9.04	7.25
44	42.90	47.85	0.54	4.94	4.11	2.76	4.27	8.73	13.73	10.58
45	46.47	40.20	0.00	6.12	2.76	6.70	3.12	8.83	17.76	16.69
46	46.87	44.98	-8.85	0.00	-6.48	-2.90	-2.48	2.85	5.09	7.42
47	50.32	-3.53	0.00	-6.20	-11.58	-20.55	-12.07	5.58	4.01	13.67
48	48.00	5.31	-10.41	-14.09	-13.88	-6.65	-10.61	0.63	3.88	10.09
49	0.00	0.00	0.00	0.00	34.60	37.65	48.61	45.91	55.64	-0.31
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.98

BASELINE INLET, STATION 8

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	67.26	39.70	55.14	45.38	15.68	29.63	19.39	29.67	29.01	23.40
2	73.65	60.68	51.19	40.63	26.04	28.68	18.73	19.76	26.51	26.01
3	67.29	64.60	54.07	56.44	25.93	23.47	18.17	16.79	22.10	25.26
4	59.58	68.69	58.59	36.68	25.17	27.28	19.00	22.55	22.25	23.06
5	0.00	69.78	52.47	45.60	18.00	32.08	20.63	21.29	20.89	24.93
6	54.80	51.41	53.83	40.98	24.62	26.16	18.28	17.05	19.59	22.60
7	59.46	71.14	53.66	35.90	19.08	20.43	19.46	18.87	20.83	22.86
8	0.00	47.20	48.24	33.33	16.14	22.29	18.19	20.36	21.16	23.16
9	0.00	44.91	46.03	39.43	17.18	24.96	19.07	18.50	21.35	22.63
10	62.38	57.87	52.27	40.31	17.83	26.90	18.59	20.89	20.85	23.95
11	0.00	63.70	53.37	36.95	18.59	26.67	19.40	20.83	21.84	21.09
12	0.00	60.09	48.91	36.20	17.97	22.08	20.51	22.42	20.35	26.26
13	0.00	74.02	51.06	34.23	18.19	24.44	19.80	22.28	21.19	23.97
14	0.00	63.20	55.85	38.28	17.54	27.04	20.02	21.05	20.80	21.59
15	0.00	57.06	51.71	35.48	19.16	25.29	21.41	22.06	21.79	22.88
16	0.00	62.40	50.22	37.23	19.04	22.94	21.06	21.56	20.82	22.74
17	0.00	55.17	52.05	36.39	18.94	22.30	21.27	21.15	21.85	24.05
18	0.00	64.37	51.77	42.97	25.35	20.50	21.85	22.38	24.27	22.64
19	0.00	67.64	56.47	34.67	19.98	25.65	20.86	21.89	22.55	23.51
20	0.00	67.15	48.68	37.67	21.11	26.13	21.09	22.27	21.87	23.41
21	0.00	61.64	51.79	37.08	21.19	21.97	21.66	22.62	22.22	22.03
22	0.00	61.75	52.60	34.77	21.18	24.72	21.62	22.36	21.31	22.16
23	0.00	51.41	51.34	37.38	20.73	24.49	22.12	23.29	21.81	22.72
24	0.00	66.43	50.56	41.27	20.77	26.58	22.27	23.09	22.35	20.65
25	0.00	56.02	48.36	34.56	21.83	24.66	22.56	22.70	22.39	22.21
26	0.00	64.93	53.64	34.97	21.77	25.40	22.45	22.24	22.48	21.44
27	0.00	70.79	48.85	40.51	21.24	24.89	22.25	22.69	23.12	23.44
28	0.00	61.70	51.34	38.97	21.74	25.83	22.32	22.88	23.13	22.70
29	0.00	56.20	50.96	41.51	22.61	27.09	22.67	23.39	22.99	23.13
30	0.00	65.72	52.15	39.39	22.37	26.37	22.96	22.93	22.97	23.95
31	0.00	51.85	53.23	45.18	22.93	25.17	22.64	23.31	23.09	22.89
32	0.00	64.60	52.37	37.25	22.51	25.59	22.85	23.37	23.17	22.69
33	0.00	56.41	52.48	35.43	23.07	26.74	23.45	23.13	23.33	22.85
34	0.00	51.62	52.89	41.64	22.99	25.30	23.51	24.05	23.19	22.48
35	64.87	63.55	48.72	38.11	23.31	27.06	23.13	23.93	23.43	23.50
36	73.23	56.63	51.82	39.99	23.41	27.89	23.51	23.55	23.57	22.91
37	67.95	61.51	54.97	40.00	23.60	25.45	23.51	23.99	23.92	23.74
38	76.76	65.59	53.81	39.68	23.78	25.91	23.58	23.89	24.14	23.38
39	73.69	68.51	51.11	40.75	24.10	27.26	23.41	24.06	23.79	24.31
40	68.58	62.67	52.67	43.48	23.90	27.79	23.77	24.24	24.09	24.35
41	68.38	65.79	52.98	41.03	24.34	27.26	24.02	24.33	24.12	24.64
42	68.03	64.40	53.10	42.45	24.84	28.21	24.47	24.15	24.59	24.43
43	68.94	61.36	55.28	42.46	25.12	31.05	24.57	24.78	24.27	24.65
44	70.69	63.84	55.09	42.22	25.34	33.07	24.83	24.92	24.60	25.51
45	67.42	72.32	53.15	42.06	28.59	33.86	25.08	24.74	25.90	25.71
46	67.91	70.97	54.37	39.85	30.94	35.46	26.56	24.98	26.71	25.59
47	66.07	67.62	57.30	43.17	35.66	33.82	28.94	28.11	27.51	27.17
48	67.56	68.66	63.23	47.96	29.27	33.10	28.92	32.73	30.05	29.43
49	66.05	69.17	35.96	40.14	36.33	38.18	24.87	36.22	31.05	27.48
50	65.12	70.34	68.33	61.13	27.20	27.58	12.85	29.77	27.74	30.25

TABLE A5.—Continued.

ENHANCED INLET, STATION 1

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	19.08	15.96	14.86	14.60	12.46	12.14	9.51	11.66	13.10	13.17
2	19.97	15.25	14.56	14.72	12.33	12.11	9.75	10.88	12.96	12.86
3	18.55	15.84	14.88	14.59	12.25	11.99	9.32	11.30	12.77	13.09
4	18.75	15.90	14.85	15.03	12.50	12.35	9.20	11.87	13.12	13.16
5	18.68	15.70	14.56	15.10	12.31	12.00	9.53	12.01	12.79	12.93
6	18.37	15.80	14.87	14.40	12.02	12.17	9.73	11.21	13.26	12.27
7	19.08	16.43	14.46	14.64	12.65	12.13	9.48	11.28	12.60	12.67
8	19.48	16.49	14.29	14.87	12.13	12.40	9.51	11.59	13.27	12.70
9	19.63	16.04	14.81	14.66	12.23	12.05	9.51	11.17	12.79	12.99
10	18.38	16.16	15.00	14.38	12.55	11.98	9.73	11.42	12.85	13.09
11	20.09	15.74	14.69	14.05	12.31	12.44	9.51	11.38	12.86	13.13
12	19.76	16.86	15.16	14.75	12.40	12.19	9.82	11.26	13.37	12.79
13	20.27	16.80	14.44	14.76	12.66	12.24	9.76	11.33	12.95	13.06
14	18.68	16.54	14.95	14.68	12.59	12.37	9.73	11.55	12.79	14.37
15	20.28	16.61	14.83	14.65	12.74	12.75	9.90	11.22	12.76	13.14
16	20.00	15.82	15.09	15.02	12.31	12.40	9.45	11.14	13.14	14.04
17	19.19	16.53	15.15	14.66	12.17	12.29	9.60	11.13	13.03	12.23
18	19.29	16.05	14.59	15.01	12.31	12.52	9.37	11.16	13.13	12.77
19	18.00	16.00	14.74	14.64	12.56	12.28	9.69	11.48	12.91	13.27
20	17.90	15.71	14.92	14.63	12.17	12.34	9.15	11.07	13.06	12.99
21	19.13	16.17	14.95	14.80	12.63	12.43	9.66	11.50	12.72	12.92
22	20.08	16.55	14.71	14.18	12.70	12.06	9.27	11.45	12.89	12.21
23	18.72	16.11	15.15	14.62	12.43	12.68	9.50	11.70	13.03	12.82
24	18.19	16.99	14.69	15.03	12.87	12.48	9.41	11.34	13.17	13.83
25	18.51	16.18	14.56	14.34	12.44	12.09	9.77	11.08	12.71	13.34
26	19.38	16.52	14.48	15.08	12.36	11.72	9.45	11.66	12.97	13.20
27	19.13	16.28	14.59	14.96	12.64	12.31	9.59	11.48	13.12	12.44
28	19.27	16.53	14.93	14.32	12.37	12.25	9.62	11.12	13.04	12.80
29	18.39	16.69	14.58	14.42	12.47	11.92	9.42	11.28	12.79	12.88
30	19.10	15.61	14.80	14.45	12.67	12.21	9.92	11.55	13.31	12.56
31	20.19	17.28	14.48	14.19	12.47	12.15	9.65	11.38	12.75	13.32
32	18.59	16.40	14.38	14.46	12.40	12.09	9.33	11.74	13.18	12.98
33	19.70	15.71	14.90	14.50	12.25	12.55	9.73	11.42	12.87	12.13
34	18.85	16.52	14.54	14.44	12.17	12.07	9.36	11.54	13.47	12.37
35	17.81	16.30	14.85	14.64	12.29	12.23	9.90	11.71	12.81	12.51
36	18.36	16.17	14.51	14.44	12.04	11.97	9.78	11.37	13.18	12.84
37	18.98	16.67	14.92	14.49	12.51	11.90	9.61	11.73	13.06	13.36
38	18.42	16.40	14.98	14.62	12.74	12.31	9.59	11.50	13.05	12.75
39	19.14	15.89	14.32	14.52	12.62	12.35	9.33	11.37	13.18	12.97
40	19.26	16.65	14.67	14.24	11.99	12.31	9.36	11.70	12.94	13.53
41	20.22	16.25	14.49	14.69	12.00	12.24	9.73	11.65	12.96	13.43
42	18.57	16.23	14.94	14.81	12.24	12.30	9.93	11.63	13.35	12.98
43	18.21	16.03	15.08	14.50	12.20	12.33	9.75	11.51	12.97	12.56
44	18.69	16.24	14.64	14.67	12.45	12.14	9.40	11.41	12.76	12.83
45	18.88	16.04	14.90	14.58	12.37	12.43	9.90	11.37	13.16	13.22
46	19.07	15.77	14.68	14.57	12.64	11.99	9.61	11.32	13.18	12.83
47	19.46	16.18	14.66	14.51	12.42	11.93	9.46	11.52	13.03	12.65
48	17.76	15.54	14.44	15.18	11.91	12.30	9.68	11.30	12.69	13.20
49	19.41	16.28	15.04	14.43	12.18	12.03	9.86	11.55	12.92	12.68
50	20.13	18.12	15.40	14.89	12.46	12.05	9.35	11.52	13.34	12.81

ENHANCED INLET, STATION 2

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	24.10	23.77	21.69	19.76	17.27	15.52	13.91	12.90	13.89	15.58
2	22.83	25.54	24.07	20.19	22.88	21.36	19.84	17.24	15.88	17.10
3	21.14	24.59	24.08	22.45	22.07	21.45	20.76	22.78	-17.82	18.81
4	19.86	22.75	22.71	22.80	20.04	18.96	18.02	21.20	-6.36	23.43
5	18.19	21.33	21.93	21.45	10.38	17.57	16.75	18.74	22.52	24.28
6	17.21	19.20	20.68	20.08	17.11	16.37	15.62	17.40	21.00	22.58
7	14.89	17.78	19.42	18.96	15.14	14.80	14.38	15.45	19.10	22.39
8	13.61	16.67	18.40	18.14	13.75	13.66	13.68	14.15	17.96	20.60
9	12.42	15.40	17.15	16.76	13.16	12.73	12.27	13.55	16.55	20.11
10	11.82	13.67	15.41	16.31	12.24	11.79	11.32	13.02	15.26	18.27
11	13.00	12.54	15.06	15.32	11.38	10.80	10.19	12.00	14.55	15.95
12	15.20	11.73	13.98	14.37	10.81	10.50	10.16	10.93	13.72	16.48
13	10.23	10.33	13.51	13.76	9.69	9.48	9.24	10.15	12.98	14.30
14	11.00	10.49	12.87	12.97	9.29	9.16	9.01	10.13	12.25	13.08
15	10.12	9.92	12.27	12.06	8.90	8.71	8.50	9.41	11.37	13.45
16	10.05	9.43	11.73	11.81	8.62	8.44	8.24	8.98	11.17	12.58
17	10.22	9.38	10.38	11.49	8.23	7.90	7.57	8.06	10.96	12.51
18	10.17	6.82	11.02	10.57	7.76	7.43	7.11	7.95	9.50	10.66
19	9.81	8.18	10.01	10.44	7.35	7.09	6.83	7.38	9.44	11.93
20	10.20	7.98	10.69	10.25	7.36	6.92	6.50	7.20	9.09	10.65
21	10.30	7.97	9.75	9.42	7.20	6.97	6.75	7.11	8.21	9.66
22	9.90	7.88	9.09	9.71	7.08	6.67	6.28	6.94	8.52	8.95
23	10.05	8.77	9.07	9.54	6.72	6.46	6.23	6.80	7.93	10.03
24	10.54	7.91	8.73	8.89	6.39	6.25	6.13	6.69	7.91	9.40
25	10.62	8.41	8.88	8.14	6.52	6.08	5.68	6.19	7.71	9.79
26	10.95	7.68	8.95	8.23	6.60	6.09	5.62	6.24	7.59	10.16
27	11.00	7.94	8.51	8.11	6.32	6.10	5.91	5.98	7.39	9.36
28	11.09	7.93	10.03	7.72	6.46	5.96	5.52	5.74	7.59	9.34
29	11.11	8.45	7.77	8.08	6.62	6.11	5.65	5.90	7.32	9.39
30	11.29	8.39	8.55	7.84	6.70	5.96	5.38	6.10	7.30	10.50
31	11.31	8.60	8.26	7.88	6.32	5.92	5.57	6.22	6.93	9.20
32	12.77	11.00	11.49	8.21	6.16	5.92	5.74	6.07	7.48	10.66
33	11.71	8.26	7.93	7.81	6.09	5.96	5.87	6.16	7.49	9.33
34	11.73	8.67	8.55	7.73	6.39	6.05	5.75	6.61	7.55	8.55
35	11.70	9.30	8.72	7.64	6.64	6.16	5.74	6.04	7.39	12.46
36	12.36	9.62	8.08	7.55	6.40	6.26	6.17	6.22	7.19	11.99
37	12.38	9.46	8.40	7.74	6.68	6.30	5.98	6.32	8.04	11.89
38	12.42	9.93	9.13	7.54	6.68	6.36	6.10	6.52	8.02	12.81
39	13.15	11.01	9.41	7.73	6.76	6.33	5.98	6.65	7.82	13.74
40	13.44	10.40	9.91	8.08	7.36	6.72	6.18	6.93	8.22	11.91
41	13.96	11.07	9.58	8.01	7.29	6.71	6.21	6.86	8.58	11.81
42	14.79	11.84	10.33	8.57	7.77	7.07	6.45	7.08	8.34	11.82
43	14.81	11.96	11.16	8.76	7.99	7.55	7.17	7.37	8.77	13.27
44	15.30	12.81	11.49	9.71	8.23	7.50	6.87	7.38	8.94	12.38
45	15.74	13.83	12.19	9.81	8.80	8.08	7.46	7.72	9.24	12.86
46	17.23	14.90	13.38	10.28	9.01	8.39	7.86	8.43	9.41	14.51
47	17.90	15.87	13.65	10.89	9.47	8.91	8.43	8.84	9.96	13.33
48	20.13	17.87	15.27	12.30	10.75	10.02	9.36	9.73	10.69	14.81
49	21.72	20.66	17.39	13.88	12.09	11.46	10.90	10.38	11.77	15.01
50	23.97	23.29	19.42	15.82	13.46	12.45	11.53	11.43	12.65	13.14

TABLE A5.—Continued.

ENHANCED INLET, STATION 3

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.10
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50
3	0.00	11.83	0.00	0.00	0.00	10.10	29.85	0.00	0.00	0.00
4	0.00	0.00	0.00	32.56	-1.02	30.88	29.97	27.74	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.47	27.40	21.34
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	9.80	1.20	10.93	0.00	0.00	0.00
9	18.09	5.28	-28.15	14.20	5.96	4.48	5.15	1.18	-15.89	0.00
10	21.74	4.39	5.20	6.88	5.20	3.39	4.36	9.77	7.63	-1.06
11	16.11	4.45	6.53	10.45	5.99	6.11	4.60	7.71	8.33	-7.65
12	15.93	5.91	7.44	7.44	7.65	5.28	3.84	6.94	12.34	18.57
13	18.18	5.95	8.67	8.34	7.33	5.07	3.62	6.71	7.21	6.79
14	16.24	5.60	6.29	8.80	6.74	4.35	3.46	6.81	6.58	13.65
15	13.24	5.58	7.77	9.80	6.62	4.02	2.83	6.68	7.66	15.28
16	9.53	5.81	6.94	8.49	6.42	4.07	2.68	6.32	7.61	14.80
17	14.69	4.79	6.31	7.49	5.45	3.54	2.49	5.69	6.88	22.65
18	21.91	4.79	5.54	7.38	5.89	3.65	2.87	4.91	6.90	16.16
19	15.65	5.52	6.39	7.27	5.36	3.23	2.67	5.16	5.56	18.15
20	22.12	6.68	6.46	7.19	5.71	3.46	2.84	5.18	6.10	17.28
21	18.26	5.22	6.65	7.15	5.49	3.23	2.84	5.36	6.04	22.45
22	19.40	6.10	5.46	7.47	5.54	3.81	2.93	5.13	5.85	7.33
23	21.49	7.52	5.81	6.77	5.15	3.77	3.23	4.88	5.56	19.47
24	21.58	7.37	5.86	7.18	5.21	3.57	3.24	5.25	5.13	20.44
25	17.08	6.95	6.01	7.00	5.45	4.00	3.36	5.22	5.50	25.39
26	16.36	8.65	6.48	7.17	5.47	4.40	3.53	5.70	5.91	11.34
27	18.33	7.85	6.32	7.21	5.50	4.81	3.63	5.63	5.95	19.79
28	21.67	8.30	6.85	7.15	5.80	4.86	4.26	5.66	5.95	16.47
29	16.94	8.85	7.01	7.56	5.73	4.73	4.16	5.62	6.05	18.41
30	19.27	9.65	7.33	7.10	5.98	4.80	4.36	5.84	6.56	20.01
31	22.61	10.41	7.36	8.42	6.25	5.01	4.60	6.05	6.12	8.36
32	21.69	10.72	8.51	8.16	6.29	5.21	4.59	6.31	6.05	16.89
33	24.44	10.87	8.43	8.32	6.58	5.74	5.24	6.40	7.00	19.05
34	24.53	12.05	9.06	8.50	6.44	5.67	5.63	7.32	6.67	19.68
35	25.59	11.76	9.23	8.81	6.89	6.13	5.66	6.94	6.69	6.19
36	20.57	13.41	10.18	9.23	7.41	6.35	6.17	7.27	6.98	20.59
37	25.38	13.89	9.63	9.47	7.68	6.68	6.25	7.39	7.59	-7.23
38	24.44	13.79	10.79	9.75	8.00	7.08	6.66	7.65	8.04	16.10
39	29.40	14.03	11.12	10.67	7.68	7.51	6.91	8.15	8.19	15.64
40	25.53	15.28	11.90	10.52	8.51	7.33	7.20	8.04	8.31	16.59
41	26.02	15.19	12.18	11.09	8.79	7.88	7.47	8.46	8.65	10.51
42	24.09	15.55	12.24	12.20	8.94	7.93	7.70	8.91	9.34	18.50
43	25.36	16.19	13.11	11.83	9.14	8.47	8.17	8.80	9.46	13.49
44	22.66	16.49	12.43	11.96	9.11	8.53	8.30	9.13	9.64	7.87
45	32.34	17.13	13.68	12.54	10.05	8.87	8.26	9.81	9.86	19.92
46	32.35	0.00	13.77	13.39	9.76	8.90	8.00	9.49	10.15	15.00
47	33.62	0.00	12.57	12.98	9.47	8.29	7.81	9.68	9.76	19.88
48	0.00	0.00	14.62	13.21	9.53	7.79	6.92	8.99	9.77	24.72
49	0.00	0.00	0.00	0.00	60.02	59.41	59.80	63.20	64.77	78.80
50	0.00	0.00	0.00	0.00	0.00	57.93	60.26	62.94	65.31	76.24

ENHANCED INLET, STATION 4

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	0.00	0.00	0.00	0.00	0.00	5.35	-0.17	0.01	2.73	0.00
2	0.00	0.00	0.00	15.52	-8.16	-0.65	-1.97	-3.90	-0.96	-0.60
3	0.00	0.00	0.00	9.43	0.00	-0.76	-1.35	-1.62	0.30	0.00
4	0.00	6.01	-5.39	0.00	4.46	-0.15	-1.43	-3.27	-3.61	0.00
5	0.00	11.12	2.04	0.32	6.01	-0.06	-1.42	-1.41	4.02	17.72
6	0.00	29.85	0.00	6.18	2.65	0.86	0.03	0.25	-1.32	23.15
7	31.17	29.28	0.94	8.49	4.37	0.48	-0.08	-1.46	0.04	17.89
8	0.00	21.38	0.53	2.50	1.70	0.81	-0.34	-1.15	-1.81	26.76
9	27.64	15.85	0.37	1.56	4.82	0.84	-0.21	-0.68	0.74	24.38
10	0.00	18.77	-0.59	3.81	3.36	0.54	-0.26	0.40	-0.50	14.56
11	30.51	15.08	0.26	3.00	2.03	1.28	0.55	-0.12	0.44	19.79
12	26.88	21.10	0.74	3.02	3.18	1.37	0.29	-0.48	0.20	21.21
13	24.15	25.91	-0.50	2.17	3.54	1.47	0.32	-0.26	-0.01	24.58
14	22.91	25.71	0.80	2.85	3.10	1.45	0.46	0.40	0.56	20.91
15	21.70	17.93	0.54	2.38	2.21	1.27	0.54	0.13	0.47	21.87
16	26.46	17.69	-0.28	2.43	2.45	1.47	0.51	-0.03	0.34	18.22
17	22.87	16.88	0.16	3.21	2.44	1.16	0.67	0.45	1.22	19.75
18	24.32	18.46	0.19	2.78	2.52	1.26	0.42	0.03	1.39	19.68
19	10.83	13.90	-0.11	2.26	2.47	1.25	0.33	0.31	0.31	22.93
20	24.94	16.96	0.73	2.66	2.29	1.04	0.12	0.35	0.75	16.07
21	20.66	20.84	0.50	2.63	2.18	0.98	0.16	0.03	0.47	16.91
22	25.53	9.28	0.80	2.34	2.03	0.86	0.08	-0.24	0.34	17.98
23	21.41	17.15	0.17	1.53	1.74	0.42	-0.30	-0.34	0.58	13.59
24	30.70	16.89	-0.21	1.72	2.35	0.26	-0.72	-0.30	0.71	9.82
25	20.32	15.22	0.18	1.23	2.34	0.12	-0.99	-0.94	0.09	12.59
26	25.33	20.48	-0.14	1.48	1.02	-0.06	-1.06	-1.02	-0.79	9.71
27	33.59	15.06	-0.19	0.65	1.28	-0.30	-0.81	-1.26	-0.85	12.66
28	20.86	15.63	-0.94	0.96	0.98	0.03	-1.17	-1.69	-0.97	14.52
29	23.87	32.37	-0.88	0.65	0.68	-0.12	-1.47	-2.01	-1.50	9.14
30	36.36	25.24	-0.72	0.56	0.52	-0.61	-1.21	-1.74	-1.59	20.66
31	0.00	36.86	-0.58	1.22	0.14	-0.69	-1.16	-1.93	-1.80	14.72
32	33.23	27.19	-0.67	4.27	0.21	-0.59	-1.23	-1.90	-1.54	14.18
33	0.00	23.29	0.01	6.37	0.08	-0.27	-1.74	-1.93	-2.07	13.92
34	0.00	20.80	4.04	0.00	0.08	1.24	-1.62	-1.93	-2.24	16.31
35	35.64	30.57	5.23	0.00	0.25	4.17	-1.23	-1.68	-2.20	12.81
36	31.53	19.70	0.00	0.00	1.93	0.00	-0.54	-1.62	-2.20	19.97
37	33.65	25.81	0.00	0.00	0.00	0.00	1.89	-1.64	-1.65	14.28
38	34.57	27.13	0.00	0.00	0.00	0.00	0.00	-0.89	-1.69	19.97
39	33.44	32.02	0.00	0.00	0.00	0.00	0.00	0.44	-1.18	13.67
40	0.00	29.55	0.00	0.00	0.00	0.00	0.00	1.02	-0.94	13.88
41	0.00	34.95	0.00	0.00	0.00	0.00	0.00	2.75	-0.58	0.00
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.18	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A5.—Continued.

ENHANCED INLET, STATION 5

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	0.00	0.00	0.00	0.00	0.00	0.00	-3.85	-4.89	-2.08	10.61
2	0.00	0.00	0.00	0.00	4.39	-0.68	-2.24	-5.07	-5.42	9.41
3	0.00	0.00	0.00	-2.98	2.71	-0.72	-3.33	-5.68	-4.26	14.25
4	19.57	0.00	0.27	-1.11	-2.16	-1.05	-2.21	-4.99	-4.16	7.47
5	12.97	0.00	0.23	-1.56	1.80	-2.07	-2.48	-4.32	-6.16	10.36
6	12.23	0.00	-1.12	-3.38	-0.17	-2.38	-3.26	-4.74	-6.31	9.80
7	-0.29	0.00	0.27	-1.37	-1.66	-1.92	-3.62	-5.60	-6.37	4.40
8	10.53	0.00	-0.73	-3.00	0.05	-1.53	-2.90	-4.09	-5.46	9.85
9	26.02	0.00	-0.46	-2.60	-2.27	-2.25	-3.04	-4.85	-5.18	7.33
10	0.00	0.00	-0.51	-2.15	-2.31	-2.15	-3.47	-4.24	-5.72	11.43
11	11.84	9.98	-0.60	-1.57	-0.53	-2.26	-3.66	-4.60	-5.53	11.09
12	-1.25	0.00	-0.35	-1.97	-0.57	-2.21	-3.41	-4.75	-5.89	7.90
13	24.04	6.17	-0.15	-1.91	-1.03	-2.06	-3.43	-4.96	-5.59	13.03
14	15.41	14.59	-0.05	-1.67	-1.35	-2.20	-3.97	-4.88	-6.13	8.45
15	-1.79	7.59	0.50	-1.76	-1.53	-2.50	-4.07	-4.45	-5.25	5.72
16	6.93	5.40	-0.07	-1.85	-1.30	-2.45	-3.83	-5.06	-5.52	10.82
17	13.07	4.96	-0.31	-1.71	-1.29	-2.58	-4.01	-5.03	-4.99	9.70
18	10.11	6.49	-0.17	-1.57	-1.46	-2.81	-3.69	-4.56	-4.92	8.98
19	7.45	9.11	-0.30	-1.39	-1.22	-2.53	-3.62	-4.64	-4.62	12.79
20	6.08	3.98	-0.24	-1.36	-1.59	-2.66	-4.00	-4.61	-4.68	10.40
21	7.01	2.04	-0.19	-1.06	-1.61	-3.04	-3.90	-4.53	-4.34	9.37
22	10.36	3.02	-0.38	-1.24	-1.83	-2.80	-3.86	-4.52	-4.33	10.06
23	9.48	1.55	-0.38	-1.42	-1.18	-2.79	-3.71	-4.50	-4.18	11.77
24	10.57	2.80	-0.27	-1.07	-0.95	-2.86	-3.57	-4.08	-4.10	5.05
25	4.57	1.78	-0.73	-1.15	-1.03	-2.36	-3.46	-4.03	-3.89	13.57
26	8.45	2.45	-0.34	-1.13	-1.32	-2.37	-3.69	-3.87	-3.46	7.38
27	0.38	0.66	-0.68	-0.85	-1.50	-2.35	-3.26	-3.76	-3.53	10.61
28	3.96	-1.28	-0.47	-0.93	-0.93	-1.98	-3.27	-3.78	-3.19	5.72
29	20.55	0.38	-0.04	-0.79	-0.83	-1.71	-2.99	-3.52	-3.14	9.10
30	18.05	1.28	-0.22	-0.58	-0.43	-1.74	-2.80	-3.38	-2.85	8.10
31	16.63	0.86	-0.32	-0.14	-0.61	-1.87	-2.55	-2.77	-2.29	10.05
32	2.11	0.25	0.18	-0.08	-0.50	-1.31	-2.21	-3.05	-2.33	8.85
33	3.01	1.49	0.04	0.72	-0.30	-1.12	-2.28	-2.62	-2.14	6.55
34	10.25	1.67	0.92	4.77	-0.27	-0.57	-1.97	-2.39	-1.64	6.79
35	19.23	1.97	0.51	9.71	-0.35	0.22	-1.98	-1.97	-0.96	5.41
36	38.24	0.85	0.67	0.00	-0.17	3.82	-1.61	-1.97	-0.34	6.86
37	39.49	3.43	1.31	0.00	0.52	8.35	-1.36	-1.34	-1.20	8.37
38	40.57	0.00	5.85	0.00	1.42	0.00	-1.34	-1.13	0.46	4.15
39	26.13	40.61	25.91	0.00	8.37	0.00	-0.24	-0.29	-2.56	5.17
40	35.02	39.25	37.92	0.00	34.28	0.00	-2.76	-1.77	-3.02	5.02
41	0.00	0.00	0.00	0.00	0.00	0.00	-3.17	-3.06	0.46	26.16
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.13	17.10
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-3.05	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENHANCED INLET, STATION 6

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	0.00	0.00	0.00	-5.97	7.22	12.21	6.45	3.46	1.41	
3	31.30	0.00	2.01	-16.65	5.22	4.87	4.50	1.97	1.20	
4	15.41	17.65	4.09	-1.58	8.35	4.85	3.93	1.54	-0.35	
5	21.67	9.14	3.14	-1.38	3.58	3.56	2.64	1.85	-2.05	
6	13.24	10.92	1.05	1.21	3.21	3.71	2.96	1.87	-0.93	
7	-0.87	7.09	2.74	2.62	3.62	3.00	2.63	1.66	0.62	
8	6.63	9.53	2.24	1.91	4.85	3.48	2.88	1.41	-0.66	
9	31.77	8.72	2.38	3.12	3.46	3.83	3.14	1.98	-0.41	
10	9.29	8.74	3.18	2.24	4.06	2.64	2.72	1.81	-0.65	
11	17.41	7.66	1.88	2.81	3.31	2.60	2.76	1.79	-1.45	
12	18.89	8.46	2.76	2.59	3.61	2.91	3.04	2.02	-0.47	
13	3.04	7.29	3.10	2.38	3.06	2.90	2.45	1.93	-0.02	
14	27.99	6.87	2.87	2.93	3.41	2.92	2.51	1.56	-0.20	
15	7.03	7.12	2.94	2.79	3.72	2.94	2.69	1.42	-0.07	
16	19.34	6.09	3.03	2.58	3.29	2.32	2.52	2.15	0.44	
17	12.19	6.04	3.12	2.81	3.45	2.29	2.38	1.71	0.34	
18	12.61	5.36	3.26	2.22	3.52	2.22	2.44	1.96	0.57	
19	14.26	5.19	2.84	2.42	3.22	2.38	2.35	1.93	0.42	
20	16.74	5.39	2.79	2.39	3.22	2.10	2.18	1.62	0.14	
21	7.38	4.79	2.82	2.57	3.15	2.42	2.23	1.73	1.04	
22	8.90	4.27	2.45	2.50	3.08	2.25	2.06	1.85	0.78	
23	12.39	4.27	2.41	2.40	3.36	1.99	2.35	1.74	0.37	
24	16.88	4.13	2.61	2.79	3.07	2.26	2.02	1.91	1.20	
25	12.51	5.05	2.23	2.53	3.25	1.91	2.14	1.65	0.83	
26	18.88	4.43	2.32	2.47	3.09	1.78	2.01	1.68	1.05	
27	18.80	4.01	2.47	2.37	2.75	1.68	1.96	1.49	0.87	
28	15.12	3.51	2.33	2.59	2.94	1.52	1.79	1.39	0.77	
29	13.25	3.79	2.23	2.40	2.80	1.65	1.90	1.56	0.67	
30	23.41	2.84	2.45	1.99	2.44	1.70	1.52	1.52	0.94	
31	13.01	3.20	2.04	2.68	2.63	1.30	1.79	1.79	0.47	
32	17.20	3.27	2.34	1.97	2.57	1.16	1.79	1.37	0.75	
33	0.00	2.79	1.78	2.22	2.40	1.14	1.80	1.67	0.52	
34	21.01	9.91	1.52	1.68	2.05	1.25	1.72	1.39	0.69	
35	43.61	15.75	1.64	1.87	2.04	1.18	1.63	1.42	0.70	
36	34.76	5.02	1.92	2.01	2.31	1.11	1.44	1.54	1.00	
37	37.42	3.43	1.43	2.22	2.43	0.78	1.65	1.37	0.70	
38	0.00	3.22	1.83	1.95	2.06	1.12	1.36	1.64	1.20	
39	39.95	2.81	2.35	1.61	2.05	1.07	1.80	1.64	1.33	
40	38.96	3.38	2.17	4.64	3.53	2.02	2.90	2.32	1.47	
41	0.00	23.88	9.64	9.87	-10.67	-42.83	7.10	6.10	1.19	
42	0.00	48.97	0.00	-33.81	0.77	-39.16	27.56	25.83	2.10	
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

TABLE A5.—Concluded.

ENHANCED INLET, STATION 7

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	64.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	12.28	40.83	0.00	28.86	18.82	13.21	11.41	8.93	0.00
4	0.00	63.35	7.72	11.47	22.67	12.88	13.84	12.04	9.60	0.00
5	0.00	62.81	9.94	0.78	-4.54	12.86	12.35	11.39	7.98	0.00
6	0.00	63.13	51.33	25.78	19.03	10.66	13.08	9.01	10.85	0.00
7	0.00	62.45	0.00	40.15	16.20	6.87	10.20	6.52	8.55	0.00
8	0.00	62.25	0.00	39.22	13.05	9.20	9.58	8.71	5.92	0.00
9	0.00	61.54	7.67	7.71	11.10	9.21	10.16	7.39	6.50	0.00
10	0.00	19.65	6.83	10.62	17.96	9.42	9.36	7.56	7.13	0.00
11	0.00	6.02	17.30	11.28	7.71	8.84	9.01	7.19	6.11	23.20
12	0.00	0.00	7.75	7.66	9.50	8.17	8.32	6.67	5.74	0.00
13	0.00	0.00	11.27	8.43	7.34	8.51	7.81	7.01	6.00	0.00
14	0.00	0.00	6.07	6.10	7.85	7.67	7.90	6.59	4.67	0.00
15	0.00	0.00	9.28	7.87	8.09	7.88	7.85	6.59	6.55	0.00
16	0.00	12.04	7.60	6.30	6.59	7.19	7.21	6.05	5.33	0.00
17	0.00	0.00	8.18	6.76	6.94	7.38	7.04	6.08	4.63	0.00
18	28.00	0.00	12.77	9.34	7.74	6.83	6.95	5.92	4.44	10.31
19	0.00	-4.46	8.45	6.99	7.07	6.84	6.57	5.77	4.75	0.00
20	0.00	0.27	7.96	6.91	7.43	6.98	6.57	5.73	4.78	18.66
21	0.00	12.92	7.47	6.05	6.16	6.13	6.17	5.33	3.80	13.98
22	0.00	0.00	6.81	5.77	6.23	6.02	6.10	5.12	4.21	16.69
23	0.00	0.00	6.20	5.41	6.12	5.74	5.95	4.19	3.62	12.06
24	0.00	38.74	6.30	5.62	6.44	5.63	5.35	4.76	3.07	0.00
25	0.00	0.00	7.01	5.51	5.53	5.52	5.31	4.63	3.63	0.00
26	0.00	0.00	6.08	5.12	5.67	5.05	5.22	4.49	3.51	10.37
27	0.00	11.19	6.96	5.49	5.52	4.87	4.76	4.06	3.21	0.00
28	0.00	13.11	6.48	5.16	5.34	4.61	4.56	3.77	3.44	0.00
29	0.00	37.76	6.16	5.11	5.55	4.41	4.56	4.30	3.17	0.00
30	0.00	0.00	5.07	4.24	4.88	4.47	4.29	3.46	2.54	16.10
31	0.00	7.20	5.93	4.69	4.92	4.14	4.00	3.41	2.76	0.00
32	0.00	10.53	4.95	4.14	4.78	3.96	3.88	3.29	2.61	14.87
33	0.00	9.30	4.89	3.85	4.27	3.67	3.62	3.00	1.93	0.00
34	0.00	12.28	4.56	3.58	4.06	3.65	3.40	3.50	2.16	0.00
35	0.00	0.00	4.92	3.88	4.28	3.66	3.17	3.03	2.66	15.04
36	53.43	0.00	5.22	3.93	4.09	3.10	3.16	2.81	2.16	0.00
37	36.84	7.71	4.90	3.59	3.71	3.25	3.06	2.79	2.18	0.00
38	0.00	0.00	3.75	2.82	3.30	2.93	3.05	2.58	2.76	15.68
39	0.00	14.27	3.66	2.76	3.26	2.64	2.64	2.52	1.86	0.00
40	0.00	11.77	3.40	2.70	3.37	2.60	2.45	2.63	2.16	0.00
41	0.00	50.35	3.31	2.69	3.43	2.02	2.41	2.22	1.71	10.53
42	52.10	45.19	3.07	1.95	2.22	2.38	2.00	2.37	1.50	9.73
43	0.00	50.70	4.28	2.57	2.34	2.17	1.93	3.18	1.43	8.60
44	0.00	50.17	48.76	44.08	40.91	1.99	2.24	2.99	2.41	15.56
45	52.97	50.09	48.45	45.00	42.32	11.04	3.74	5.17	2.44	14.55
46	52.10	0.00	0.00	0.00	41.92	40.18	3.09	10.66	3.37	31.66
47	52.62	47.63	0.00	0.00	0.00	0.00	-15.24	-7.31	-7.00	30.50
48	48.53	46.75	0.00	0.00	0.00	-1.78	-2.68	-4.34	-8.45	28.92
49	0.00	0.00	0.00	0.00	0.00	56.10	53.01	50.19	52.04	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENHANCED INLET, STATION 8

CP	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10-REL FLOW ANGLE DIF
1	0.00	16.48	60.23	55.84	0.00	49.15	60.65	37.16	39.87	51.27
2	0.00	17.76	59.44	57.74	0.00	49.08	58.99	31.49	40.03	42.13
3	0.00	62.92	59.77	56.53	0.00	52.68	57.92	39.24	26.62	52.61
4	0.00	50.34	60.61	57.21	0.00	43.75	58.95	28.19	38.43	58.12
5	0.00	32.13	62.06	56.85	0.00	44.24	58.35	28.20	26.17	22.99
6	0.00	21.20	61.49	57.64	0.00	22.40	63.44	27.44	36.25	53.04
7	0.00	28.59	63.27	57.77	62.38	34.98	47.67	26.17	38.13	34.50
8	0.00	19.59	63.28	63.48	0.00	31.38	33.22	25.25	26.51	56.18
9	0.00	53.14	69.20	62.30	0.00	30.43	26.17	25.43	31.43	40.69
10	0.00	33.26	0.00	61.05	0.00	28.87	28.58	23.86	29.37	53.18
11	0.00	23.61	0.00	63.73	0.00	27.81	26.02	23.71	26.90	52.78
12	0.00	43.59	0.00	0.00	64.25	24.79	25.54	24.09	28.10	44.86
13	0.00	35.47	2.73	63.01	0.00	24.17	25.50	23.93	29.14	57.54
14	0.00	20.79	0.00	58.62	0.00	24.91	25.22	23.66	24.10	49.73
15	0.00	45.10	0.00	45.90	54.44	24.52	25.01	23.37	28.63	56.95
16	0.00	57.02	0.00	59.59	59.25	24.64	25.81	24.41	30.24	54.37
17	0.00	59.95	0.00	63.98	60.59	24.46	25.46	23.67	31.09	56.80
18	0.00	58.07	0.00	51.59	63.85	25.50	27.62	24.92	30.76	56.38
19	0.00	45.70	0.00	62.70	56.23	24.76	23.94	24.03	29.60	53.46
20	0.00	59.75	10.20	62.81	54.12	25.72	24.69	24.55	28.71	44.80
21	0.00	54.08	0.00	0.00	58.18	24.83	24.27	24.59	29.71	55.76
22	0.00	46.85	0.00	65.83	58.98	24.76	24.09	24.33	27.41	53.51
23	0.00	32.41	0.00	58.63	0.00	24.66	24.42	25.03	30.89	56.20
24	0.00	42.86	0.00	57.34	0.00	25.21	24.51	24.70	29.39	50.10
25	0.00	73.09	9.91	68.98	61.95	24.70	25.87	24.62	28.53	55.75
26	0.00	57.28	0.00	27.47	62.34	25.65	25.97	24.58	30.03	56.01
27	0.00	55.82	0.00	62.47	52.49	25.46	26.15	24.95	26.98	51.51
28	0.00	48.98	18.96	68.23	0.00	25.71	25.71	24.91	29.60	52.86
29	0.00	52.75	7.86	24.69	57.66	25.08	26.13	24.90	27.94	50.56
30	0.00	71.72	0.00	20.16	0.00	25.44	26.25	24.97	30.44	56.11
31	0.00	43.83	0.00	6.63	60.43	25.84	26.17	24.83	27.97	52.22
32	0.00	69.18	0.00	61.87	63.53	25.76	26.32	25.17	29.44	43.73
33	0.00	40.55	0.00	25.83	60.76	25.98	26.57	24.86	29.89	56.92
34	0.00	58.58	0.00	26.59	58.98	26.25	26.29	25.27	28.02	58.39
35	0.00	44.65	7.31	59.99	54.19	25.31	26.28	25.36	28.21	54.87
36	0.00	52.25	20.84	23.18	0.00	25.16	26.50	25.46	29.01	54.74
37	0.00	60.34	22.68	39.52	0.00	25.82	26.36	25.39	27.30	49.18
38	0.00	56.61	25.06	26.28	0.00	26.55	26.57	25.41	29.73	49.76
39	0.00	51.26	31.20	53.44	61.85	26.35	26.63	25.20	29.65	55.73
40	0.00	59.24	31.14	68.29	62.58	26.42	26.90	25.50	28.52	56.77
41	0.00	55.93	62.76	61.86	58.08	26.29	26.72	25.65	28.66	49.93
42	76.85	53.49	63.28	64.99	52.68	26.52	26.81	25.69	30.08	50.80
43	76.80	66.22	65.10	62.46	56.95	26.54	26.99	25.66	28.89	54.80
44	76.74	56.44	9.85	30.03	58.88	26.70	27.28	25.55	29.91	52.17
45	0.00	68.32	8.51	30.72	59.20	27.09	27.48	25.87	29.51	56.04
46	0.00	70.18	0.00	38.00	59.97	27.82	27.78	26.26	29.07	49.64
47	71.65	67.45	68.80	64.39	59.61	28.93	28.80	26.81	29.65	58.27
48	71.57	67.79	62.59	63.11	59.93	30.53	30.00	27.99	30.56	51.38
49	72.61	68.96	60.77	63.49	61.29	35.24	35.16	32.22	31.23	49.90
50	74.63	65.68	60.39	59.95	0.00	42.10	54.08	36.28	36.56	46.33

X. APPENDIX B

COMPUTED PREDICTIONS

B1. Relative total (axial/relative tangential) velocities

B2. Relative flow angles

B3. Flow/grid deviation velocities

B4. Flow/grid deviation angles

TABLE B1.—RELATIVE TOTAL (AXIAL/RELATIVE TANGENTIAL) VELOCITIES

AKKAY NUMBER: 4

RELATIVE AXIAL/TANGENTIAL VELOCITY CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133.874
77	0.000	4.412	29.918	52.185	48.295	56.800	60.226	52.686	23.148	19.606	271.142
75	0.000	26.609	38.408	77.215	58.807	67.382	67.736	72.255	43.286	43.727	271.142
73	0.000	45.092	30.467	64.722	29.677	31.750	27.102	55.364	54.788	65.441	271.142
71	0.000	57.113	13.237	32.034	14.533	19.605	28.043	22.058	57.703	80.824	271.142
69	0.000	84.963	21.327	11.561	73.683	92.642	107.257	29.758	55.771	90.360	271.142
67	0.000	137.770	86.940	79.202	161.845	204.498	207.720	91.755	53.525	94.508	271.142
65	0.000	192.620	165.716	161.885	235.298	283.941	277.285	162.481	52.863	95.777	271.142
63	0.000	224.695	217.154	219.987	266.415	302.145	302.839	211.312	53.340	96.561	271.142
61	0.000	233.359	236.702	244.903	270.765	294.822	303.583	234.048	53.963	97.092	271.142
59	0.000	230.032	238.930	249.907	265.622	284.550	297.875	241.310	53.414	96.260	271.142
57	0.000	223.246	234.425	246.458	258.961	276.746	292.179	242.009	50.639	93.257	271.142
55	0.000	215.821	228.361	240.880	253.177	271.159	287.555	239.606	46.330	88.140	271.142
53	0.003	209.234	222.507	235.079	248.354	266.753	283.798	236.669	40.213	80.736	271.142
51	0.013	203.574	217.185	229.547	244.209	262.869	280.558	233.739	31.938	71.123	271.142
49	0.046	198.782	212.401	224.642	240.492	259.232	277.636	230.905	22.424	60.207	271.142
47	0.089	194.848	208.060	220.215	236.916	255.692	274.835	228.286	11.962	48.504	271.142
45	0.117	191.332	203.906	215.942	233.243	252.175	271.989	225.850	3.245	37.367	271.142
43	0.309	187.943	199.792	211.609	229.402	248.672	269.092	223.956	8.608	27.549	271.142
41	0.125	184.075	195.480	206.974	225.348	245.165	266.000	222.631	18.479	17.822	271.142
39	0.136	178.272	189.359	201.126	220.290	241.062	262.648	221.511	27.893	12.494	271.142
37	0.030	171.362	183.155	195.353	215.200	237.062	259.161	220.285	33.360	18.442	271.142
35	0.083	164.008	176.898	189.771	210.025	232.775	255.602	219.453	38.803	25.842	271.142
33	0.049	156.690	170.639	184.276	204.656	228.044	251.747	219.020	45.330	30.856	271.142
31	0.016	149.118	164.217	178.661	198.914	222.779	247.310	218.860	53.717	33.310	271.142
29	0.005	140.939	157.512	172.786	192.689	216.868	241.944	218.315	64.577	36.931	271.142
27	0.001	132.158	150.608	166.654	186.075	210.361	235.293	216.184	73.058	41.327	271.142
25	0.000	122.525	143.292	160.002	178.937	203.328	227.623	212.969	76.964	42.191	271.142
23	0.000	111.929	135.634	152.321	170.832	195.329	218.910	208.922	78.614	40.674	271.142
21	0.000	100.584	127.572	143.139	161.396	185.936	208.762	202.555	78.827	37.858	271.142
19	0.000	89.057	118.513	131.940	150.282	174.831	196.792	193.435	78.790	36.172	271.142
17	0.000	76.963	106.593	118.407	137.440	161.976	182.759	181.101	78.033	36.721	271.142
15	0.000	61.755	89.899	103.578	124.364	148.901	167.761	165.998	74.418	37.257	271.142
13	0.000	42.799	71.554	92.140	115.875	141.362	157.948	153.610	66.678	29.202	271.142
11	0.000	33.915	63.248	90.109	116.176	143.777	161.063	156.715	67.810	14.261	271.142
9	0.000	41.251	66.128	94.252	121.275	150.450	169.104	167.526	84.841	37.326	271.142
7	0.000	47.136	69.426	96.641	123.222	152.997	173.307	172.680	93.683	44.871	271.142
5	0.000	40.957	61.776	85.071	107.396	133.175	154.321	155.520	80.692	34.151	271.142
3	0.000	22.682	36.929	51.442	65.204	81.726	98.079	100.915	45.911	15.829	271.142
1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	136.168

1

?RAY NUMBER: 4

ELATIVE AXIAL/TANGENTIAL VELOCITY P	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133.749
77	0.000	15.701	4.440	31.948	26.348	32.938	39.473	31.221	19.912	21.897	270.965
75	0.000	43.303	3.787	49.975	33.352	40.556	51.431	47.661	40.631	46.740	270.965
73	0.000	70.039	18.848	45.482	14.881	18.092	29.475	42.279	57.711	69.012	270.965
71	0.000	88.823	33.565	24.955	16.466	18.551	8.414	21.905	68.916	85.340	270.965
69	0.000	106.713	52.509	4.845	54.699	63.262	55.746	13.938	74.720	95.820	270.965
67	0.000	134.147	88.145	46.718	111.015	135.068	129.109	50.068	77.455	101.809	270.965
65	0.000	168.858	138.821	108.792	180.163	222.516	213.445	101.967	79.543	105.217	270.965
63	0.000	198.394	184.698	170.793	229.918	271.756	266.549	153.206	81.015	107.887	270.965
61	0.000	213.833	212.313	211.313	251.415	282.537	286.146	187.288	81.191	109.807	270.965
59	0.000	217.074	223.801	230.361	256.133	278.375	289.523	204.815	79.304	110.038	270.965
57	0.000	214.359	225.809	236.051	253.839	271.907	287.588	212.340	75.451	107.953	270.965
55	0.000	209.382	223.345	235.123	249.555	266.650	284.527	214.184	69.829	103.474	270.965
53	0.000	203.413	218.916	231.362	245.026	262.520	281.485	214.088	62.690	96.698	270.965
51	0.002	197.201	213.774	226.314	240.820	259.022	278.608	213.207	53.775	87.859	270.965
49	0.010	191.747	208.721	221.269	237.075	255.737	275.884	211.944	43.819	77.712	270.965
47	0.031	187.326	204.041	216.653	233.535	252.445	273.161	210.343	33.040	66.701	270.965
45	0.009	183.547	199.614	212.272	229.886	249.063	270.431	208.816	22.917	56.028	270.965
43	0.075	180.153	195.431	207.908	226.053	245.648	267.564	208.074	13.126	46.023	270.965
41	0.019	176.163	191.034	203.142	221.893	242.151	264.424	207.943	3.674	35.999	270.965
39	0.024	170.057	184.527	196.976	216.566	237.927	260.975	207.770	8.822	28.975	270.965
37	0.011	162.749	177.860	190.903	211.189	233.748	257.288	207.511	16.420	30.635	270.965
35	0.009	155.044	171.141	185.064	205.766	229.239	253.585	207.908	23.810	33.935	270.965
33	0.016	147.082	164.300	179.260	200.125	224.243	249.475	208.646	30.471	34.988	270.965
31	0.003	138.493	157.110	173.244	194.041	218.626	244.668	209.383	37.043	32.083	270.965
29	0.000	129.032	149.520	166.924	187.474	212.289	238.664	209.185	44.832	27.063	270.965
27	0.000	118.632	141.498	160.237	180.511	205.378	231.295	207.173	51.940	24.566	270.966
25	0.000	106.927	132.689	152.862	172.932	197.839	222.918	204.037	57.006	23.966	270.965
23	0.000	93.577	123.165	144.546	164.544	189.312	213.308	199.437	59.302	21.953	270.965
21	0.000	78.843	112.869	135.379	155.547	179.876	202.406	192.284	60.441	19.508	270.965
19	0.000	64.021	101.752	126.199	146.899	170.480	190.907	182.973	61.455	17.723	270.965
17	0.000	53.114	91.225	119.324	141.044	164.067	181.782	174.172	62.760	13.829	270.965
15	0.000	54.356	86.274	117.406	140.389	164.092	180.942	173.821	69.442	11.737	270.965
13	0.000	66.425	89.165	119.327	143.042	167.777	186.132	182.253	87.370	43.488	270.965
11	0.000	78.027	95.157	122.861	146.964	172.609	192.168	190.503	105.875	68.971	270.965
9	0.000	83.005	98.725	125.117	149.174	175.966	197.289	194.515	114.874	74.858	270.965
7	0.000	77.370	93.089	117.696	139.747	165.221	188.589	184.049	106.371	64.216	270.965
5	0.000	60.779	74.929	93.951	111.701	132.171	155.209	154.456	82.775	44.949	270.965
3	0.000	32.958	41.691	53.112	64.220	77.357	93.801	94.335	44.606	22.009	270.965
1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	136.166

TABLE B1.—Continued.

RAY NUMBER: 4

ELATIVE P	AXIAL/TANGENTIAL VELOCITY HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	132.970
77	0.000	23.463	23.049	10.813	6.157	13.167	9.611	5.908	16.118	21.665	269.453
75	0.000	48.983	48.051	24.067	15.682	30.690	23.418	9.353	31.046	42.458	269.453
73	0.000	71.041	69.283	37.251	28.130	49.899	41.285	8.370	42.350	57.901	269.453
71	0.000	89.789	86.629	49.389	42.022	68.226	60.202	3.724	49.429	66.912	269.453
69	0.000	107.913	102.550	61.397	57.053	86.354	79.260	5.897	53.582	71.589	269.453
67	0.000	124.169	117.989	74.842	74.037	106.007	100.004	14.551	56.739	74.822	269.453
65	0.000	137.165	132.230	91.416	93.685	129.074	124.544	24.568	60.195	77.951	269.453
63	0.000	147.539	144.878	112.253	118.381	159.026	156.237	35.806	63.467	80.082	269.453
61	0.000	155.578	155.956	133.777	144.754	190.025	188.716	48.349	65.489	80.933	269.453
59	0.000	160.936	165.034	152.665	167.898	214.288	215.104	61.006	66.187	80.868	269.453
57	0.000	163.285	171.548	168.023	185.878	229.000	233.561	72.434	65.782	80.158	269.453
55	0.000	162.595	175.087	179.823	198.428	235.425	245.222	82.156	64.492	78.970	269.453
53	0.000	159.072	175.674	188.205	207.039	237.320	252.182	90.612	62.628	77.499	269.453
51	0.000	153.214	174.217	193.098	211.617	235.525	255.604	97.707	60.449	75.913	269.453
49	0.000	146.358	172.001	194.617	212.197	231.939	256.356	102.974	58.037	74.258	269.453
47	0.000	139.370	167.532	191.804	209.007	228.280	255.364	106.884	55.349	72.389	269.453
45	0.000	133.255	161.663	186.857	204.465	224.762	253.173	109.864	52.226	70.053	269.453
43	0.000	127.797	155.868	182.433	200.479	221.091	249.966	112.249	48.410	66.980	269.453
41	0.000	122.442	149.620	177.698	196.163	216.631	245.572	114.273	43.676	62.758	269.453
39	0.000	118.135	143.196	171.665	190.498	210.943	240.078	116.111	38.651	57.452	269.453
37	0.000	115.708	139.561	168.886	187.506	207.027	234.922	119.347	34.400	52.601	269.453
35	0.000	114.142	136.849	167.032	185.530	204.340	230.510	124.017	29.246	46.719	269.453
33	0.000	113.481	134.852	165.780	184.370	202.898	227.202	130.295	21.096	38.413	269.453
31	0.000	114.049	133.771	165.094	183.898	202.417	225.476	138.379	8.753	27.940	269.453
29	0.000	116.075	133.743	164.860	183.931	202.634	224.995	147.802	13.834	22.591	269.453
27	0.000	119.646	134.802	164.924	184.291	203.328	225.182	158.585	35.589	32.175	269.453
25	0.000	124.618	136.843	165.150	184.798	204.256	225.833	170.157	60.801	50.319	269.453
23	0.000	130.469	139.730	165.474	185.281	205.187	226.711	180.631	86.377	71.257	269.453
21	0.000	136.689	143.392	166.017	185.722	205.950	227.484	189.952	110.821	92.843	269.453
19	0.000	142.576	147.529	167.086	186.430	206.735	228.164	197.822	132.746	114.100	269.453
17	0.000	147.047	151.391	168.810	187.827	208.257	229.605	204.401	148.822	130.842	269.453
15	0.000	148.540	153.433	170.300	189.204	210.463	232.037	209.025	156.144	137.905	269.453
13	0.000	145.075	151.084	168.526	186.851	209.294	231.187	206.465	153.316	134.645	269.453
11	0.000	135.786	142.528	159.292	175.558	197.247	218.741	194.608	141.983	125.975	269.453
9	0.000	122.372	128.882	141.574	154.754	172.429	193.442	177.224	127.036	116.691	269.453
7	0.000	105.094	110.452	116.750	127.222	141.079	160.074	155.305	109.119	103.720	269.453
5	0.000	79.951	83.924	86.352	94.883	107.018	121.959	123.215	83.608	80.534	269.453
3	0.000	42.556	44.870	46.235	51.455	59.125	69.070	69.634	45.176	43.438	269.453
1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	135.537

RRAY NUMBER: 4

ELATIVE P	AXIAL/TANGENTIAL VELOCITY HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	132.022
77	0.000	31.245	33.247	29.592	19.533	21.331	17.075	1.434	8.934	14.122	267.386
75	0.000	61.174	64.309	57.680	39.408	43.969	35.775	4.954	16.624	27.740	267.386
73	0.000	84.783	88.292	78.013	55.264	62.967	52.943	10.819	21.359	37.235	267.386
71	0.000	105.052	109.169	92.671	67.454	77.950	67.379	18.007	22.417	40.765	267.386
69	0.000	122.602	127.067	105.148	78.474	91.445	80.727	25.469	20.899	40.146	267.386
67	0.000	136.341	141.181	117.004	90.020	105.205	94.731	32.692	19.270	39.024	267.386
65	0.000	145.661	151.045	128.924	102.549	119.385	109.722	39.317	19.961	40.188	267.386
63	0.000	151.899	158.032	141.137	116.874	135.130	126.166	45.013	23.479	43.262	267.386
61	0.000	155.958	163.415	152.897	133.461	153.713	144.680	49.511	27.950	45.917	267.386
59	0.000	157.740	167.271	163.538	150.164	172.786	163.082	53.243	31.651	47.716	267.386
57	0.000	157.273	169.231	172.729	165.191	189.095	179.428	56.603	34.198	48.597	267.386
55	0.000	154.981	169.273	180.185	177.944	201.295	193.100	60.000	35.312	48.372	267.386
53	0.000	151.534	167.935	185.693	188.586	214.358	205.381	63.979	34.668	46.749	267.386
51	0.000	147.615	166.187	189.435	196.434	222.829	214.945	68.865	31.899	43.354	267.386
49	0.000	143.969	165.082	191.516	201.167	223.254	221.156	74.554	26.639	37.851	267.386
47	0.000	142.284	163.690	190.906	201.841	220.293	224.668	81.059	19.189	30.237	267.386
45	0.000	141.286	161.107	187.797	199.484	217.496	226.413	88.470	10.425	20.878	267.386
43	0.000	139.679	158.025	183.947	196.581	215.243	227.116	96.681	6.670	10.326	267.386
41	0.000	137.740	155.409	180.636	193.825	212.935	227.303	105.424	17.296	8.472	267.386
39	0.000	135.749	153.065	178.472	191.963	211.384	227.379	114.672	32.400	25.023	267.386
37	0.000	134.663	151.378	176.603	190.340	210.322	227.489	124.786	49.521	45.374	267.386
35	0.000	135.598	151.053	174.853	188.876	209.281	227.651	135.566	67.049	65.419	267.386
33	0.000	138.176	151.771	173.407	187.846	208.453	227.799	146.843	84.109	83.238	267.386
31	0.000	141.309	152.963	172.255	187.130	207.847	227.871	158.416	100.489	98.733	267.386
29	0.000	144.510	154.361	171.279	186.536	207.369	227.788	170.292	116.726	112.619	267.386
27	0.000	147.578	155.889	170.500	185.971	206.896	227.535	181.252	132.006	125.132	267.386
25	0.000	150.130	157.551	170.100	185.550	206.425	227.189	190.607	145.996	136.198	267.386
23	0.000	152.250	159.291	170.279	185.577	206.251	227.006	198.208	158.486	145.858	267.386
21	0.000	153.455	160.587	170.897	186.190	206.834	227.549	204.328	168.355	154.216	267.386
19	0.000	152.615	160.326	171.002	186.637	207.989	228.974	208.066	173.035	158.795	267.386
17	0.000	148.381	156.961	168.668	184.708	207.673	229.291	207.790	171.349	157.944	267.386
15	0.000	139.713	149.137	161.648	177.277	201.855	223.857	201.356	163.909	152.866	267.386
13	0.000	127.064	136.961	149.182	163.011	186.814	209.104	189.105	153.481	147.796	267.386
11	0.000	111.803	121.356	131.872	143.026	162.787	185.709	173.162	142.629	146.512	267.386
9	0.000	95.330	103.593	111.405	120.572	136.424	157.842	155.054	130.461	145.043	267.386
7	0.000	77.845	84.214	90.081	98.676	113.016	130.310	133.708	113.713	132.581	267.386
5	0.000	55.846	61.170	66.097	73.616	85.925	100.118	103.440	87.559	102.109	267.386
3	0.000	28.004	31.179	34.089	38.426	45.724	55.030	56.553	47.220	55.174	267.386
1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	134.538

TABLE B1.—Continued.

RRAY NUMBER: 4

ELATIVE AXIAL/TANGENTIAL VELOCITY

P	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	131.107
77	0.000	27.091	30.456	31.897	22.364	19.669	17.243	4.930	3.401	7.126	265.277
75	0.000	54.524	60.125	62.576	45.131	40.943	35.890	11.299	6.384	14.654	265.277
73	0.000	77.399	84.021	85.402	62.785	59.036	52.633	18.748	8.226	20.353	265.277
71	0.000	97.996	106.111	102.682	75.593	73.193	66.167	26.127	8.236	22.340	265.277
69	0.000	117.172	126.625	117.367	86.276	85.609	78.031	32.768	6.760	21.548	265.277
67	0.000	133.071	143.317	130.396	96.556	98.066	89.839	38.665	5.237	20.422	265.277
65	0.000	143.454	154.292	141.833	106.848	110.926	101.975	43.840	4.802	20.223	265.277
63	0.000	148.023	159.310	151.204	117.399	123.471	114.150	48.135	5.167	19.871	265.277
61	0.000	149.899	161.441	159.107	129.657	136.541	127.618	51.794	5.012	17.544	265.277
59	0.000	150.207	162.531	166.028	142.851	150.814	142.117	55.428	3.499	13.965	265.277
57	0.000	149.470	162.816	171.924	155.515	164.099	156.221	59.692	0.538	10.074	265.277
55	0.000	147.984	162.328	176.554	166.837	175.408	169.092	64.822	4.685	6.702	265.277
53	0.000	145.599	161.072	179.780	176.650	192.629	181.207	71.007	10.943	6.938	265.277
51	0.000	142.070	159.183	181.900	184.144	208.344	191.839	78.665	18.407	12.231	265.277
49	0.000	137.770	156.997	182.883	189.079	213.615	200.188	87.578	26.837	19.737	265.277
47	0.000	133.873	154.762	181.897	190.268	211.842	205.879	96.678	35.901	28.426	265.277
45	0.000	131.273	151.949	178.729	187.729	208.402	209.533	105.381	45.834	38.496	265.277
43	0.000	128.743	149.032	175.411	184.743	205.781	212.005	113.853	57.346	50.869	265.277
41	0.000	126.512	146.904	173.445	183.292	204.218	213.805	122.478	71.188	66.868	265.277
39	0.000	125.823	145.538	171.273	181.953	203.503	215.040	131.826	87.178	85.501	265.277
37	0.000	126.994	145.535	169.300	180.673	202.910	216.025	142.014	102.231	102.064	265.277
35	0.000	129.693	147.075	168.438	180.145	202.381	216.886	152.328	115.993	116.209	265.277
33	0.000	133.169	149.144	167.711	179.660	201.837	217.574	162.118	128.466	128.020	265.277
31	0.000	136.704	151.151	166.949	179.234	201.311	218.116	171.598	139.930	138.098	265.277
29	0.000	140.015	152.996	166.362	178.931	200.772	218.464	180.791	150.500	146.853	265.277
27	0.000	142.945	154.757	166.213	178.838	200.237	218.584	189.602	160.161	154.227	265.277
25	0.000	144.947	156.394	166.719	179.237	200.027	218.686	197.363	168.551	159.843	265.277
23	0.000	146.263	157.808	167.727	180.252	200.635	219.339	203.146	175.026	163.570	265.277
21	0.000	146.063	157.962	168.247	181.098	201.903	220.707	206.352	177.811	165.324	265.277
19	0.000	142.897	155.182	166.420	179.700	201.966	220.952	204.936	174.664	163.320	265.277
17	0.000	135.684	148.245	160.421	173.591	197.356	216.261	197.362	166.440	158.182	265.277
15	0.000	125.172	137.681	150.005	161.997	185.151	203.975	184.091	156.801	153.391	265.277
13	0.000	112.559	124.165	135.442	145.567	165.743	184.456	167.598	149.519	153.146	265.277
11	0.000	98.000	108.101	117.881	126.660	143.830	160.603	149.821	144.101	158.116	265.277
9	0.000	81.939	90.359	99.473	108.451	124.628	137.197	131.274	134.988	160.177	265.277
7	0.000	64.786	71.975	81.587	91.349	106.678	116.120	111.032	117.121	145.548	265.277
5	0.000	45.423	51.468	60.254	68.763	81.613	89.419	84.237	88.388	109.992	265.277
3	0.000	22.542	25.974	31.059	35.986	43.499	48.754	45.207	46.981	59.110	265.277
1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133.485

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RRAY NUMBER: 4

ELATIVE AXIAL/TANGENTIAL VELOCITY

P	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	130.479
77	0.000	4.977	1.323	10.724	9.591	8.326	9.708	5.390	0.152	3.402	263.715
75	0.000	5.910	6.677	25.294	22.011	19.470	21.601	12.052	0.407	7.174	263.715
73	0.000	2.301	18.783	41.470	35.150	32.040	34.485	19.630	1.170	9.540	263.715
71	0.000	19.626	36.932	57.128	47.142	44.237	46.519	27.012	3.007	9.005	263.715
69	0.000	45.802	61.712	74.203	58.066	55.904	57.554	33.556	5.944	6.448	263.715
67	0.000	74.784	90.089	93.067	68.648	67.778	68.365	39.268	9.065	3.826	263.715
65	0.000	98.687	113.969	111.154	79.233	79.950	79.078	44.158	11.234	2.442	263.715
63	0.000	113.941	128.736	125.850	90.111	91.805	89.536	48.762	12.821	1.102	263.715
61	0.000	122.113	135.949	136.759	102.713	104.011	102.108	55.068	15.267	3.170	263.715
59	0.000	126.339	139.866	145.404	117.073	117.842	117.004	62.131	18.685	9.747	263.715
57	0.000	128.949	142.775	153.015	131.739	131.469	132.283	69.168	23.437	17.206	263.715
55	0.000	130.682	145.010	159.586	145.637	144.015	146.980	75.800	28.881	24.098	263.715
53	0.002	131.417	146.344	164.765	158.485	162.825	161.131	81.573	34.212	30.264	263.715
51	0.011	130.858	146.645	168.680	169.176	185.560	173.701	86.953	39.267	36.028	263.715
49	0.044	128.605	146.019	171.543	177.119	201.382	186.570	93.513	44.689	41.911	263.715
47	0.112	124.306	144.892	173.297	181.828	206.823	193.271	101.297	51.440	48.560	263.715
45	0.014	121.177	143.347	173.154	182.403	205.787	199.197	109.382	59.736	56.365	263.715
43	0.249	120.648	142.195	171.677	180.700	203.369	203.247	117.523	69.948	65.805	263.715
41	0.384	121.285	141.849	170.518	179.921	202.210	206.111	125.780	82.604	78.422	263.715
39	0.417	122.643	142.475	170.011	180.432	202.722	208.107	134.407	97.298	94.473	263.715
37	0.289	124.768	143.824	168.977	179.794	202.653	209.630	143.399	111.512	109.860	263.715
35	0.080	127.749	145.988	168.398	179.509	202.510	211.014	152.537	124.704	124.057	263.715
33	0.076	131.392	148.605	168.315	179.641	202.412	212.321	161.853	136.670	136.347	263.715
31	0.038	135.252	151.276	168.341	179.823	202.289	213.562	171.299	147.532	146.617	263.715
29	0.001	138.891	153.695	168.310	179.920	202.049	214.644	180.404	157.363	155.158	263.715
27	0.007	142.264	155.960	168.508	180.169	201.760	215.575	189.174	166.067	162.077	263.715
25	0.001	145.168	158.219	169.401	181.011	201.850	216.656	197.370	173.376	167.064	263.715
23	0.000	147.349	160.284	171.001	182.584	202.891	218.537	204.082	178.886	169.818	263.715
21	0.000	147.994	161.144	172.185	183.864	204.523	221.013	207.565	180.865	170.532	263.715
19	0.000	145.673	158.972	170.796	182.416	204.337	221.247	205.324	177.333	168.499	263.715
17	0.000	139.341	152.491	165.023	175.875	198.687	215.313	196.282	169.789	165.027	263.715
15	0.000	130.081	142.650	155.077	164.278	185.716	202.041	182.122	163.081	163.679	263.715
13	0.000	119.389	130.630	141.615	148.913	167.267	182.906	166.005	160.729	167.187	263.715
11	0.000	107.078	116.484	125.335	131.831	147.614	161.058	149.641	159.937	174.507	263.715
9	0.000	93.133	100.304	107.638	115.413	130.140	140.166	132.871	151.859	176.725	263.715
7	0.000	77.165	82.111	89.612	99.058	112.853	120.653	114.257	130.229	160.913	263.715
5	0.000	56.428	60.453	67.584	76.028	87.614	94.350	88.177	96.825	123.227	263.715
3	0.000	29.090	31.566	35.784	40.760	47.527	52.366	48.189	52.438	67.782	263.715
1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	132.700

TABLE B1.—Continued.

ARRAY NUMBER: 4

RELATIVE AXIAL/TANGENTIAL VELOCITY

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	13.038	98.861	108.961	111.825	114.639	123.676	131.859	130.173	134.245	153.395	263.057
77	13.087	97.340	107.238	109.367	111.774	120.096	127.037	125.791	124.224	143.937	263.015
75	13.203	94.411	103.833	103.374	105.083	111.628	116.567	116.226	108.018	127.741	263.015
73	12.223	87.562	95.960	91.760	93.152	97.837	101.349	102.145	88.468	107.494	263.015
71	6.930	72.797	79.857	75.379	77.238	80.577	83.390	83.614	63.496	80.446	263.015
69	1.698	51.691	57.351	59.327	61.494	63.870	66.659	61.604	36.642	48.666	263.015
67	2.339	42.158	50.164	58.904	55.858	57.524	60.618	46.420	19.647	24.131	263.015
65	0.166	60.160	74.987	83.723	67.153	68.723	71.140	47.739	19.565	15.807	263.015
63	3.028	88.399	105.288	111.191	83.183	84.001	85.776	57.560	28.245	21.515	263.015
61	9.077	107.134	122.202	128.414	98.613	98.074	100.267	66.113	34.753	30.009	263.015
59	2.141	116.421	130.422	139.736	113.764	111.745	114.664	73.069	38.400	35.790	263.015
57	0.193	121.876	135.714	148.476	128.425	124.530	128.981	79.405	41.850	40.181	263.015
55	1.513	125.932	139.905	155.780	142.155	136.186	142.870	84.839	45.409	44.222	263.015
53	6.498	128.731	142.936	161.563	155.086	153.526	156.558	89.068	48.749	47.939	263.015
51	14.840	129.997	144.605	165.985	166.234	176.356	168.955	92.606	51.762	51.397	263.015
49	19.056	129.491	144.970	169.347	174.998	195.658	179.722	96.915	54.899	54.877	263.015
47	5.581	126.623	144.289	171.866	180.924	205.544	188.961	103.360	59.175	58.973	263.015
45	18.612	122.100	142.854	173.102	183.254	206.975	195.586	110.410	65.241	64.251	263.015
43	2.167	120.690	141.784	172.390	182.149	204.877	200.114	118.020	73.392	71.096	263.015
41	20.401	121.641	141.894	171.274	180.991	203.262	203.345	125.823	84.105	80.740	263.015
39	21.685	123.352	143.014	171.121	181.684	203.784	205.680	134.032	97.289	94.131	263.015
37	21.005	125.275	144.491	170.647	181.527	203.997	207.513	142.726	110.995	108.358	263.015
35	16.867	127.918	146.655	170.303	181.317	204.060	209.198	151.670	124.507	122.700	263.015
33	11.857	131.315	149.353	170.287	181.414	204.092	210.831	160.783	137.153	136.042	263.015
31	9.333	135.283	152.294	170.484	181.711	204.122	212.447	170.115	148.664	147.667	263.015
29	11.520	139.303	155.100	170.694	181.983	204.057	214.047	179.687	159.136	157.433	263.015
27	19.170	143.041	157.610	171.013	182.309	203.910	215.539	189.026	168.434	165.384	263.015
25	3.571	146.314	160.023	171.884	183.144	204.095	217.197	197.875	176.271	171.265	263.015
23	5.262	149.040	162.374	173.505	184.756	205.245	219.746	205.514	182.325	176.780	263.015
21	1.020	150.369	163.713	174.902	186.154	207.024	223.012	210.208	185.259	176.301	263.015
19	0.945	148.701	162.009	173.599	184.464	206.658	223.772	209.007	183.136	175.614	263.015
17	0.661	142.808	155.831	167.585	177.071	198.801	216.624	200.133	176.925	173.742	263.015
15	2.877	134.680	147.165	158.462	165.996	185.013	200.460	183.801	168.607	170.400	263.015
13	2.146	125.375	137.536	147.451	153.478	169.907	183.981	170.132	166.725	173.156	263.015
11	2.286	116.123	127.971	135.669	140.302	153.622	166.170	156.511	161.784	174.273	263.015
9	3.085	109.298	120.729	125.909	129.650	140.676	151.532	146.513	154.312	170.309	263.015
7	10.777	104.920	115.828	119.548	123.081	133.171	142.878	139.793	148.120	165.629	263.015
5	13.029	102.044	112.576	115.830	119.109	128.656	137.945	136.382	145.284	164.281	263.013
3	13.158	99.565	110.485	113.601	116.657	125.941	134.756	132.861	140.435	158.977	263.015
1	13.038	98.867	108.971	111.825	114.641	123.680	131.739	130.023	134.204	153.347	263.806

RELATIVE AXIAL/TANGENTIAL VELOCITY

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133.778
77	0.000	5.585	28.221	54.273	50.259	46.051	46.673	43.184	19.782	19.099	271.018
75	0.000	27.387	37.144	84.694	63.501	31.437	26.943	60.126	39.259	41.308	271.016
73	0.000	43.963	32.209	79.826	36.728	23.431	33.611	47.679	53.174	59.864	271.018
71	0.000	52.585	19.447	52.586	6.125	87.216	103.935	20.468	62.667	74.658	271.018
69	0.000	75.020	9.074	14.451	63.193	185.824	195.449	22.246	67.975	85.450	271.018
67	0.000	123.542	66.750	43.172	150.733	274.295	268.525	73.622	70.070	90.873	271.018
65	0.000	179.075	144.399	123.186	227.083	302.475	296.877	132.807	70.459	92.502	271.018
63	0.000	215.325	201.059	189.863	260.622	297.586	301.879	175.080	69.906	93.126	271.018
61	0.000	228.695	226.998	226.040	266.912	286.924	297.937	196.278	69.452	94.213	271.018
59	0.000	228.226	234.145	240.042	263.412	278.946	292.014	204.589	68.735	95.146	271.018
57	0.000	222.826	232.670	242.261	257.747	273.825	287.505	206.287	66.829	94.646	271.018
55	0.000	216.407	228.222	239.665	252.311	269.987	284.341	204.543	63.214	91.935	271.018
53	0.003	209.983	222.971	235.269	247.550	266.581	281.886	202.111	57.487	86.786	271.018
51	0.013	204.010	217.614	229.740	243.293	263.351	279.697	199.319	50.069	79.613	271.018
49	0.046	198.651	212.418	224.075	239.431	260.249	277.603	196.448	42.439	71.533	271.018
47	0.089	194.035	207.471	218.760	235.763	257.222	275.422	193.957	34.358	63.182	271.018
45	0.117	189.896	202.694	213.800	232.080	254.209	273.144	191.721	27.068	55.655	271.018
43	0.309	186.133	198.015	208.986	228.250	251.190	270.736	189.832	20.547	49.474	271.018
41	0.125	181.953	193.109	203.878	224.083	248.067	268.160	188.276	14.654	44.609	271.018
39	0.136	175.865	186.791	197.656	219.018	244.577	265.353	186.614	11.265	41.675	271.018
37	0.030	168.751	180.326	191.435	213.860	241.022	262.365	184.462	15.278	44.935	271.018
35	0.083	161.247	173.843	185.470	208.627	237.090	259.210	182.436	22.137	50.443	271.018
33	0.049	153.771	167.379	179.674	203.212	232.631	255.791	181.176	28.085	54.619	271.018
31	0.016	146.029	160.768	173.830	197.420	227.560	251.733	180.797	30.745	54.446	271.018
29	0.005	137.691	153.919	167.791	191.132	221.789	246.873	181.445	29.216	48.651	271.018
27	0.001	128.747	146.902	161.549	184.453	215.419	240.701	181.942	28.132	43.155	271.018
25	0.000	118.948	139.524	154.817	177.249	208.547	233.182	181.895	31.632	43.334	271.018
23	0.000	108.234	131.886	147.073	169.077	200.760	224.588	180.914	37.650	48.853	271.018
21	0.000	96.909	123.950	137.825	159.582	191.671	214.547	177.492	45.482	55.783	271.018
19	0.000	85.632	115.067	126.517	148.422	181.063	202.701	171.320	53.394	65.741	271.018
17	0.000	73.945	103.197	112.689	135.536	169.118	189.058	161.841	57.100	69.024	271.018
15	0.000	58.996	86.172	97.117	122.384	157.780	175.053	149.204	52.390	64.977	271.018
13	0.000	39.454	66.743	84.419	113.802	152.870	167.096	138.069	37.043	51.828	271.018
11	0.000	28.454	57.050	81.533	114.113	156.562	171.883	140.710	21.688	28.256	271.018
9	0.000	35.152	59.490	85.632	119.459	162.900	179.888	151.332	38.799	13.632	271.018
7	0.000	41.236	63.067	88.737	122.173	164.260	183.667	155.753	48.406	10.863	271.018
5	0.000	36.033	56.562	79.069	107.321	141.981	163.251	139.378	39.964	8.420	271.018
3	0.000	19.834	33.955	48.207	65.650	87.482	104.808	89.381	20.240	7.688	271.018
1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	136.084

TABLE B1.—Continued.

ARRAY NUMBER: 4

RELATIVE AXIAL/TANGENTIAL VELOCITY

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133.659
77	0.000	14.665	5.254	36.333	28.522	24.453	32.096	26.198	18.845	20.455	270.842
75	0.000	41.052	1.790	59.591	37.948	20.281	33.457	41.370	39.096	43.624	270.842
73	0.000	66.422	14.976	61.184	21.573	12.284	3.285	38.864	56.649	64.305	270.842
71	0.000	83.249	26.824	45.314	8.446	54.198	38.850	22.756	68.950	79.010	270.842
69	0.000	98.060	41.687	19.462	45.457	110.330	93.163	8.091	77.179	89.004	270.842
67	0.000	122.549	71.924	16.750	99.823	196.797	175.190	35.708	82.420	95.428	270.842
65	0.000	156.288	119.720	71.631	169.024	263.860	246.755	77.731	85.556	98.915	270.842
63	0.000	187.346	166.842	134.701	220.699	282.795	279.552	120.926	87.202	101.257	270.842
61	0.000	206.244	198.248	182.804	244.536	279.004	286.899	151.695	87.569	103.383	270.842
59	0.000	212.774	214.076	210.916	251.371	272.457	285.966	168.861	86.310	104.469	270.842
57	0.000	211.893	219.837	224.334	250.855	268.107	283.658	176.877	83.164	103.641	270.842
55	0.000	208.138	220.049	228.896	247.790	265.152	281.552	179.430	78.161	100.583	270.842
53	0.000	203.173	217.497	229.084	243.996	262.539	279.677	180.251	71.327	95.356	270.842
51	0.002	197.461	213.411	225.931	240.011	259.881	277.854	179.913	63.599	88.532	270.842
49	0.010	191.780	208.573	220.862	236.153	257.126	275.973	178.904	55.546	80.931	270.842
47	0.031	186.693	203.506	215.383	232.453	254.293	273.915	177.822	47.555	73.243	270.842
45	0.009	182.246	198.435	210.127	228.755	251.382	271.697	176.873	40.068	66.248	270.842
43	0.075	178.374	193.544	205.128	224.919	248.409	269.305	176.149	33.316	60.438	270.842
41	0.019	173.917	188.416	199.844	220.657	245.258	266.707	175.573	27.705	55.993	270.842
39	0.024	167.407	181.698	193.334	215.354	241.666	263.804	174.404	24.905	53.575	270.842
37	0.011	159.806	174.748	186.825	209.910	237.928	260.712	172.746	26.801	55.666	270.842
35	0.009	151.918	167.795	180.609	204.429	233.774	257.382	171.565	30.771	59.310	270.842
33	0.016	143.797	160.750	174.497	198.736	229.059	253.712	171.124	34.318	61.965	270.842
31	0.003	135.017	153.361	168.238	192.596	223.656	249.238	171.273	35.101	61.213	270.842
29	0.000	125.358	145.604	161.736	185.968	217.501	243.661	171.861	31.471	55.729	270.842
27	0.000	114.747	137.433	154.898	178.942	210.791	236.770	172.372	27.934	50.205	270.842
25	0.000	102.777	128.499	147.367	171.299	203.527	228.618	172.409	28.911	49.039	270.842
23	0.000	89.157	118.885	138.856	162.844	195.410	219.354	170.855	33.122	52.360	270.842
21	0.000	74.159	108.451	129.396	153.782	186.619	208.875	166.801	38.321	57.313	270.842
19	0.000	59.060	97.010	119.754	145.078	178.263	197.849	160.483	40.662	58.656	270.842
17	0.000	47.755	85.859	112.268	139.179	173.238	189.677	153.985	35.126	50.406	270.842
15	0.000	48.846	80.275	109.925	138.544	174.119	189.787	154.261	27.009	26.522	270.842
13	0.000	60.955	82.944	111.841	141.315	177.641	195.129	162.762	44.016	15.014	270.842
11	0.000	72.467	88.966	115.607	145.503	182.156	200.988	171.495	64.542	33.582	270.842
9	0.000	77.503	92.791	118.448	148.316	185.073	205.980	175.129	73.180	35.435	270.842
7	0.000	72.324	87.772	112.225	139.679	173.259	196.761	165.085	65.775	26.421	270.842
5	0.000	56.740	70.686	90.135	112.250	138.762	162.561	138.610	47.710	15.113	270.842
3	0.000	30.705	39.312	51.156	65.017	82.144	99.311	84.117	23.655	5.797	270.842
1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	136.067

ARRAY NUMBER: 4

RELATIVE AXIAL/TANGENTIAL VELOCITY

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	132.862
77	0.000	20.675	20.636	6.462	4.325	25.804	21.915	2.724	13.841	19.033	269.330
75	0.000	43.700	43.718	15.440	11.683	53.986	45.972	3.793	27.057	37.812	269.330
73	0.000	64.479	64.115	25.444	22.120	77.959	67.988	2.713	37.837	52.402	269.330
71	0.000	83.526	81.111	35.415	34.514	97.452	86.843	2.865	45.497	61.462	269.330
69	0.000	101.397	96.058	45.479	48.438	115.854	105.192	7.169	51.024	66.825	269.330
67	0.000	116.494	109.465	56.767	64.531	136.248	125.604	13.178	55.700	70.941	269.330
65	0.000	128.402	121.271	70.532	83.258	163.814	151.999	20.913	59.943	74.411	269.330
63	0.000	138.192	132.122	87.931	106.791	195.800	183.351	30.814	63.234	76.583	269.330
61	0.000	146.151	142.405	107.768	132.717	221.805	211.444	42.770	65.241	77.775	269.330
59	0.000	152.043	151.600	127.173	156.372	236.728	231.396	55.305	66.048	78.441	269.330
57	0.000	155.622	159.088	144.357	175.182	242.293	243.798	66.689	66.005	78.784	269.330
55	0.000	156.771	164.384	158.794	188.727	242.529	250.956	76.208	65.386	78.923	269.330
53	0.000	155.469	167.142	170.657	198.889	240.576	254.905	84.255	64.483	78.976	269.330
51	0.000	151.695	167.354	179.508	205.470	237.934	256.626	90.662	63.432	78.978	269.330
49	0.000	145.745	165.809	185.102	208.455	235.234	256.721	95.128	62.236	78.839	269.330
47	0.000	138.904	163.774	187.393	208.251	232.450	255.662	98.126	60.773	78.309	269.330
45	0.000	132.584	160.173	185.056	204.990	229.383	253.683	100.105	58.730	77.014	269.330
43	0.000	127.046	154.810	179.914	200.527	225.848	250.796	101.412	55.745	74.625	269.330
41	0.000	120.822	147.456	173.634	195.587	221.581	246.818	102.255	51.774	70.963	269.330
39	0.000	114.711	139.567	167.514	190.327	216.967	241.773	102.852	47.664	66.360	269.330
37	0.000	111.669	135.200	164.491	187.296	213.610	237.006	104.558	44.691	62.447	269.330
35	0.000	110.101	132.301	162.537	185.300	211.339	233.091	107.260	41.512	57.950	269.330
33	0.000	109.700	130.371	161.233	184.163	210.211	230.392	110.944	36.782	52.000	269.330
31	0.000	110.596	129.432	160.518	183.735	209.922	229.007	116.178	28.843	44.094	269.330
29	0.000	112.932	129.563	160.271	183.817	210.209	228.772	123.552	16.088	35.335	269.330
27	0.000	116.731	130.772	160.341	184.228	210.858	229.303	133.149	12.208	30.972	269.330
25	0.000	121.788	132.918	160.596	184.789	211.666	230.146	144.438	32.770	37.091	269.330
23	0.000	127.570	135.867	160.976	185.330	212.438	231.092	155.995	58.202	52.052	269.330
21	0.000	133.568	139.473	161.600	185.829	213.029	231.818	167.297	83.530	70.813	269.330
19	0.000	139.104	143.494	162.749	186.595	213.628	232.460	177.261	106.109	89.894	269.330
17	0.000	143.222	147.151	164.537	188.062	214.971	233.940	185.534	122.475	104.902	269.330
15	0.000	144.499	148.970	166.145	189.556	217.033	236.314	191.738	129.508	110.602	269.330
13	0.000	141.092	146.544	164.712	187.393	215.607	235.080	190.871	126.998	107.521	269.330
11	0.000	132.181	138.307	156.166	176.286	202.928	221.617	180.167	117.423	101.493	269.330
9	0.000	119.331	125.526	139.315	155.566	177.197	195.223	163.801	105.014	96.462	269.330
7	0.000	102.709	108.455	115.212	127.962	145.098	161.549	143.104	89.962	87.827	269.330
5	0.000	78.405	83.206	85.338	95.562	110.661	123.488	112.845	68.318	68.700	269.330
3	0.000	41.946	44.729	45.842	52.103	61.831	70.450	63.191	36.562	36.948	269.330
1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	135.451

TABLE B1.—Continued.

ARRAY NUMBER: 4

RELATIVE AXIAL/TANGENTIAL VELOCITY

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	131.894
77	0.000	28.865	31.350	26.931	18.236	28.936	25.933	4.488	8.598	14.391	267.264
75	0.000	56.703	60.847	52.566	36.608	57.723	52.012	11.118	15.781	28.184	267.264
73	0.000	79.152	84.118	71.247	51.102	79.768	72.822	19.287	19.895	37.735	267.264
71	0.000	98.654	103.906	84.786	62.202	96.283	88.584	27.424	20.461	41.332	267.264
69	0.000	115.022	120.200	96.165	72.306	110.945	102.527	34.693	19.000	41.059	267.264
67	0.000	127.503	132.466	106.546	83.061	125.658	116.762	40.971	18.279	40.786	267.264
65	0.000	136.571	141.292	116.378	95.009	141.157	132.090	46.191	20.538	43.136	267.264
63	0.000	143.396	148.138	126.426	108.266	159.728	150.027	50.226	25.787	47.243	267.264
61	0.000	148.476	153.984	137.037	123.673	180.104	168.825	53.284	31.664	50.960	267.264
59	0.000	151.633	158.795	147.765	139.966	198.601	185.788	56.002	36.758	53.810	267.264
57	0.000	152.856	162.192	158.030	155.326	212.494	199.520	58.631	40.603	55.677	267.264
55	0.000	152.419	164.008	167.361	169.032	221.150	209.840	61.387	42.704	56.276	267.264
53	0.000	150.723	164.389	175.219	181.605	227.279	217.743	64.804	42.557	55.148	267.264
51	0.000	148.122	163.770	181.482	191.673	229.326	223.062	68.884	39.835	51.824	267.264
49	0.000	144.821	162.914	186.027	198.397	227.776	226.241	73.570	34.534	46.177	267.264
47	0.000	141.893	162.364	188.247	201.674	225.303	227.865	78.811	27.122	38.534	267.264
45	0.000	140.178	160.250	186.492	201.131	223.101	228.484	84.621	18.590	29.569	267.264
43	0.000	138.175	156.771	182.338	198.225	221.067	228.557	90.952	10.970	20.021	267.264
41	0.000	135.694	153.256	178.545	195.320	219.146	228.426	97.665	11.707	12.732	267.264
39	0.000	133.720	150.459	176.009	193.367	217.874	228.280	104.785	22.448	19.365	267.264
37	0.000	133.062	148.901	173.981	191.663	216.867	228.202	112.748	36.546	35.793	267.264
35	0.000	134.396	148.808	172.350	190.271	215.938	228.238	121.540	51.617	53.128	267.264
33	0.000	137.131	149.644	170.973	189.239	215.162	228.327	131.158	66.755	68.614	267.264
31	0.000	140.174	150.796	169.796	188.480	214.535	228.412	141.495	81.791	82.255	267.264
29	0.000	143.165	152.066	168.773	187.839	213.971	228.440	152.478	96.956	94.854	267.264
27	0.000	145.882	153.409	167.952	187.217	213.357	228.340	163.973	112.117	106.653	267.264
25	0.000	148.071	154.864	167.505	186.722	212.701	228.162	174.341	126.149	117.220	267.264
23	0.000	149.831	156.366	167.624	186.661	212.304	228.173	182.872	138.610	126.268	267.264
21	0.000	150.671	157.396	168.171	187.187	212.656	228.951	190.233	148.906	134.155	267.264
19	0.000	149.499	156.876	168.228	187.569	213.594	230.676	195.184	153.735	138.313	267.264
17	0.000	145.010	153.349	165.949	185.607	212.995	231.256	196.076	152.004	137.041	267.264
15	0.000	136.386	145.698	159.275	178.264	206.734	225.803	190.747	144.902	132.007	267.264
13	0.000	124.130	133.973	147.337	164.088	191.065	210.477	179.289	135.532	127.742	267.264
11	0.000	109.367	118.878	130.446	143.988	166.277	186.829	164.103	126.461	128.061	267.264
9	0.000	93.314	101.566	110.190	121.328	139.460	158.877	146.847	116.464	128.915	267.264
7	0.000	76.203	82.480	88.991	99.367	115.954	131.444	126.533	102.010	119.888	267.264
5	0.000	54.697	59.851	65.289	74.398	88.825	101.521	97.764	78.587	94.570	267.264
3	0.000	27.459	30.546	33.720	39.043	47.759	56.246	53.406	42.362	51.712	267.264
1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	134.465

ARRAY NUMBER: 4

RELATIVE AXIAL/TANGENTIAL VELOCITY

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	130.971
77	0.000	25.489	29.605	31.270	21.188	23.482	22.743	5.888	4.917	9.200	265.156
75	0.000	51.381	58.364	61.270	42.660	48.063	46.273	13.233	9.426	18.833	265.156
73	0.000	73.323	81.578	83.368	59.239	67.971	65.798	21.429	12.665	26.419	265.156
71	0.000	93.503	102.996	99.699	71.300	83.129	80.715	29.176	13.805	29.930	265.156
69	0.000	112.167	122.520	113.418	81.426	96.299	93.510	35.887	13.145	30.237	265.156
67	0.000	127.331	137.978	125.223	91.204	109.155	105.952	41.642	12.128	29.695	265.156
65	0.000	137.351	147.894	134.730	100.991	121.847	118.432	46.416	11.952	29.272	265.156
63	0.000	142.714	153.010	142.340	110.751	135.605	132.063	49.931	12.486	27.802	265.156
61	0.000	145.953	156.086	149.273	121.820	151.709	147.286	52.504	12.547	24.624	265.156
59	0.000	147.751	158.433	156.145	134.554	169.013	162.137	55.230	11.247	20.583	265.156
57	0.000	148.298	159.962	162.763	147.548	184.165	175.103	58.876	8.304	15.771	265.156
55	0.000	147.730	160.528	168.692	159.769	195.437	185.801	63.892	4.758	9.908	265.156
53	0.000	146.027	160.119	173.509	171.139	207.275	195.025	70.601	6.801	2.928	265.156
51	0.000	143.102	158.808	177.219	180.462	215.721	201.839	78.329	13.956	5.151	265.156
49	0.000	138.918	156.710	179.768	187.057	217.371	206.284	86.198	22.124	13.481	265.156
47	0.000	133.830	154.115	180.490	190.633	215.310	209.291	93.791	30.483	22.241	265.156
45	0.000	129.786	150.847	178.299	189.919	212.703	211.581	101.042	39.418	32.040	265.156
43	0.000	126.979	147.317	174.586	187.141	210.662	213.210	108.113	49.736	43.920	265.156
41	0.000	124.455	144.304	171.548	185.083	209.400	214.526	115.300	62.102	58.905	265.156
39	0.000	123.181	143.028	169.231	183.720	208.943	215.401	123.181	76.261	75.821	265.156
37	0.000	124.987	143.511	167.240	182.381	208.422	216.126	131.784	89.521	90.575	265.156
35	0.000	128.137	144.887	165.999	181.592	207.896	216.829	141.042	101.894	103.090	265.156
33	0.000	131.463	146.635	165.055	180.998	207.404	217.453	150.223	113.545	113.730	265.156
31	0.000	134.557	148.292	164.186	180.487	206.913	217.992	159.322	124.581	123.102	265.156
29	0.000	137.488	149.841	163.475	180.039	206.332	218.422	168.457	134.966	131.435	265.156
27	0.000	139.960	151.292	163.196	179.776	205.675	218.713	177.529	144.480	138.482	265.156
25	0.000	141.607	152.679	163.597	180.016	205.287	219.047	186.007	152.830	143.751	265.156
23	0.000	142.639	153.874	164.542	180.913	205.706	219.986	192.567	159.491	147.100	265.156
21	0.000	142.205	153.852	165.068	181.709	206.812	221.768	196.374	162.548	148.665	265.156
19	0.000	138.932	151.009	163.363	180.331	206.703	222.518	195.692	159.880	146.707	265.156
17	0.000	131.802	144.188	157.633	174.268	201.788	218.236	189.213	152.202	141.624	265.156
15	0.000	121.557	133.948	147.611	162.718	189.069	205.898	177.476	142.847	136.809	265.156
13	0.000	109.341	120.915	133.491	146.306	169.018	186.654	162.939	135.984	136.770	265.156
11	0.000	95.252	105.377	116.276	127.385	146.585	163.072	147.142	131.465	142.543	265.156
9	0.000	79.676	88.069	98.041	109.204	127.153	139.705	130.583	124.063	146.487	265.156
7	0.000	63.019	70.058	80.325	92.183	109.175	118.588	111.577	108.581	135.222	265.156
5	0.000	44.221	50.062	59.362	69.713	84.093	91.991	85.121	82.463	103.985	265.156
3	0.000	21.977	25.286	30.661	34.718	45.273	50.640	45.883	43.974	56.492	265.156
1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133.413

TABLE B1.—Concluded.

ARRAY NUMBER: 4

RELATIVE AXIAL/TANGENTIAL VELOCITY

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	130.359
77	0.000	7.009	0.702	10.958	9.275	8.824	11.722	5.405	1.594	5.291	263.595
75	0.000	10.386	3.417	25.535	21.119	20.620	25.830	12.043	3.102	11.038	263.594
73	0.000	5.025	13.637	41.274	33.393	33.770	40.581	19.529	4.143	15.230	263.594
71	0.000	10.563	30.458	56.546	44.516	46.401	53.884	26.766	3.944	16.054	263.594
69	0.000	35.971	54.608	73.458	54.725	58.486	65.879	33.165	2.374	14.240	263.594
67	0.000	66.369	83.611	91.424	64.722	70.905	77.559	38.805	1.551	11.866	263.594
65	0.000	92.675	108.674	107.771	74.699	83.882	89.103	43.705	3.601	10.272	263.594
63	0.000	109.859	124.261	120.429	84.624	96.929	100.795	48.293	6.234	8.209	263.594
61	0.000	119.241	132.017	129.625	95.897	111.423	115.463	54.325	9.203	3.662	263.594
59	0.000	124.427	136.635	137.444	109.395	128.537	132.200	60.844	12.449	3.126	263.594
57	0.000	127.959	140.426	145.141	123.942	145.332	148.233	67.261	16.922	10.348	263.594
55	0.000	130.478	143.527	152.491	138.341	159.602	162.301	73.431	22.059	16.889	263.594
53	0.002	131.763	145.555	158.812	152.262	177.283	174.807	79.454	27.299	22.920	263.594
51	0.011	131.536	146.300	164.066	164.410	195.531	185.358	86.186	32.954	29.008	263.594
49	0.044	129.535	145.791	168.274	174.017	206.655	193.297	93.479	39.564	35.655	263.594
47	0.112	125.403	144.305	171.253	180.668	209.995	198.658	100.606	47.060	43.057	263.594
45	0.014	120.495	142.213	172.302	183.693	209.232	202.389	107.398	55.425	51.301	263.594
43	0.249	118.650	140.202	170.791	183.101	207.806	205.264	114.206	65.206	60.977	263.594
41	0.384	118.626	139.031	168.624	181.879	207.095	207.524	121.275	77.022	73.446	263.595
39	0.417	119.644	139.381	167.722	181.954	207.378	209.107	128.788	90.314	88.421	263.594
37	0.289	122.262	141.232	166.912	181.566	207.622	210.343	136.654	102.845	102.230	263.594
35	0.080	125.657	143.526	166.171	181.220	207.629	211.487	144.749	114.446	114.665	263.594
33	0.076	129.302	145.871	165.683	181.096	207.532	212.617	153.210	125.163	125.425	263.594
31	0.038	132.777	148.102	165.396	181.073	207.399	213.772	162.234	135.284	134.632	263.594
29	0.001	135.882	150.112	165.216	181.035	207.148	214.872	171.260	144.754	142.518	263.594
27	0.007	138.848	152.104	165.335	181.144	206.789	215.876	180.195	153.236	148.956	263.594
25	0.001	141.449	154.153	166.172	181.843	206.737	217.069	188.714	160.380	153.446	263.594
23	0.000	143.389	156.046	167.761	183.334	207.626	219.155	195.749	165.943	155.718	263.594
21	0.000	143.913	156.827	169.019	184.633	209.154	222.030	199.686	168.321	156.346	263.594
19	0.000	141.642	154.718	167.817	183.271	208.863	222.742	198.212	165.368	154.555	263.594
17	0.000	135.542	148.476	162.345	176.812	202.942	217.273	190.494	158.353	151.273	263.594
15	0.000	126.643	139.032	152.786	165.261	189.470	204.427	178.152	151.644	149.724	263.594
13	0.000	116.386	127.519	139.764	149.904	170.420	185.698	164.151	148.811	152.843	263.594
11	0.000	104.550	113.916	123.900	132.807	150.292	164.051	149.547	147.986	160.332	263.594
9	0.000	91.061	98.229	106.486	116.392	132.608	142.973	134.050	141.561	163.891	263.594
7	0.000	75.552	80.467	88.531	100.146	115.314	123.228	115.861	123.015	150.899	263.594
5	0.000	55.370	59.312	66.855	77.285	90.115	96.893	89.695	92.368	117.550	263.594
3	0.000	28.631	31.060	35.568	41.768	49.392	54.239	49.254	50.251	65.596	263.594
1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	132.635

ARRAY NUMBER: 4

RELATIVE AXIAL/TANGENTIAL VELOCITY

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	13.032	97.046	107.191	111.412	116.851	125.252	132.865	131.992	132.132	147.602	262.937
77	13.081	95.709	105.715	109.320	114.342	121.689	127.727	128.332	124.999	140.816	262.895
75	13.197	93.021	102.744	103.805	108.002	112.949	116.884	119.978	111.471	127.517	262.895
73	12.218	86.538	95.520	92.531	96.122	98.675	101.402	106.834	93.620	109.554	262.895
71	6.927	72.151	79.726	76.069	79.728	81.006	83.694	88.468	70.178	84.643	262.895
69	1.697	50.691	56.405	59.149	62.644	64.288	68.358	65.032	41.539	52.619	262.895
67	2.338	39.278	47.029	56.890	54.382	58.967	65.731	46.948	19.499	24.900	262.895
65	0.166	55.462	70.186	80.578	63.819	71.600	78.693	46.724	15.367	13.167	262.895
63	3.027	83.793	100.763	107.077	78.714	88.293	95.160	57.504	23.552	17.613	262.895
61	9.073	103.710	118.377	122.675	92.657	103.991	111.807	66.643	30.325	26.048	262.895
59	2.140	114.046	127.180	132.749	106.603	119.949	128.230	73.092	33.524	31.303	262.895
57	0.193	120.343	133.177	141.225	120.822	135.307	143.753	78.591	36.549	35.038	262.895
55	1.512	125.128	138.129	149.036	134.816	148.851	157.671	83.253	39.607	38.426	262.895
53	6.495	128.458	141.797	155.723	148.605	166.440	170.310	87.304	42.502	41.571	262.895
51	14.834	130.068	143.926	161.326	161.001	186.813	181.043	91.579	45.467	44.753	262.895
49	19.048	129.903	144.577	165.918	171.283	202.200	189.799	97.526	49.515	48.598	262.895
47	5.579	127.665	143.896	169.509	178.959	209.350	195.857	103.883	55.057	53.579	262.895
45	18.603	122.795	142.162	171.782	183.592	210.307	199.899	110.110	61.895	59.719	262.895
43	2.166	119.408	140.108	171.483	184.310	209.075	202.881	116.379	70.165	67.186	262.895
41	20.391	119.137	139.156	169.606	183.199	208.132	205.299	123.010	80.451	77.117	262.895
39	21.675	120.437	139.869	168.885	183.248	208.258	207.148	130.172	92.646	90.073	262.895
37	20.995	122.800	141.765	168.543	183.229	208.663	208.650	137.743	104.850	103.129	262.895
35	16.859	125.746	144.106	168.162	183.105	208.939	210.055	145.600	116.654	115.794	262.895
33	11.852	129.193	146.671	167.863	183.072	209.043	211.457	153.812	127.769	127.393	262.895
31	9.329	132.838	149.221	167.733	183.163	209.069	212.908	162.483	138.154	137.584	262.895
29	11.514	136.411	151.628	167.739	183.276	208.989	214.422	171.741	147.921	146.354	262.895
27	19.161	139.776	153.868	167.981	183.489	208.794	215.926	181.118	156.802	153.609	262.895
25	3.570	142.768	156.115	168.837	184.231	208.872	217.625	190.168	164.321	158.874	262.895
23	5.260	145.274	158.369	170.486	185.813	209.904	220.297	198.020	170.282	161.816	262.895
21	1.020	146.516	159.645	171.988	187.298	211.613	223.877	203.110	173.634	163.230	262.895
19	0.944	144.939	158.025	170.893	185.789	211.133	225.079	202.831	172.347	162.989	262.895
17	0.661	139.195	152.050	165.157	178.523	202.864	218.363	195.613	166.998	161.696	262.895
15	2.876	131.295	143.674	156.369	167.533	188.415	202.555	181.337	158.998	158.564	262.895
13	2.145	122.366	134.461	145.839	155.269	172.746	186.334	169.135	156.664	160.735	262.895
11	2.285	113.463	125.256	134.503	142.301	156.054	168.505	156.646	152.305	161.813	262.895
9	3.084	106.891	118.324	125.065	131.724	142.707	153.574	147.319	146.438	159.034	262.895
7	10.772	102.686	113.638	118.832	125.097	134.948	144.507	141.036	141.671	155.741	262.895
5	13.023	99.928	110.497	115.126	121.054	130.253	139.445	137.870	139.887	155.500	262.893
3	13.152	97.576	108.504	112.931	118.610	127.461	136.053	134.359	136.163	151.298	262.895
1	13.032	97.051	107.201	111.412	116.853	125.256	132.738	131.840	132.090	147.553	263.686

TABLE B2.—RELATIVE FLOW ANGLES

RELATIVE FLOW ANGLE CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000
77	0.000	61.247	57.621	57.931	58.337	60.534	61.847	56.784	57.164	63.192	90.000
75	0.000	57.810	57.578	58.094	58.904	61.103	61.642	55.253	59.285	64.658	90.000
73	0.000	55.318	58.308	58.313	60.817	62.558	58.047	51.035	61.787	66.063	90.000
71	0.000	51.418	64.516	58.400	51.175	56.658	71.356	29.768	64.616	67.322	90.000
69	0.000	48.732	46.187	59.806	57.179	60.049	67.409	89.069	67.990	68.643	90.000
67	0.000	50.213	52.567	60.378	59.542	62.246	67.472	74.015	71.788	70.138	90.000
65	0.000	53.871	55.452	61.642	61.097	63.255	67.356	72.852	74.890	71.418	90.000
63	0.000	57.509	57.546	61.951	61.494	62.976	67.197	73.479	75.572	71.223	90.000
61	0.000	60.244	59.040	61.497	61.219	62.323	66.845	73.956	73.464	69.473	90.000
59	0.000	62.069	60.240	60.845	60.760	61.799	66.502	74.217	70.120	67.462	90.000
57	0.000	63.229	61.222	60.259	60.330	61.491	66.278	74.331	66.946	65.953	90.000
55	0.000	64.027	61.987	59.807	59.969	61.324	66.154	74.420	64.258	64.987	90.000
53	0.000	64.597	62.626	59.532	59.676	61.228	66.097	74.515	62.260	64.555	90.000
51	0.000	64.994	63.147	59.406	59.449	61.176	66.089	74.544	60.749	64.563	90.000
49	0.000	65.313	63.581	59.385	59.267	61.156	66.112	74.555	58.565	64.613	90.000
47	0.000	65.614	63.958	59.455	59.124	61.159	66.158	74.483	53.101	64.524	90.000
45	0.000	65.941	64.317	59.595	59.008	61.195	66.224	74.356	3.959	63.368	90.000
43	0.000	66.329	64.691	59.784	58.910	61.265	66.315	74.186	-87.097	59.457	90.000
41	0.000	66.777	65.093	60.050	58.840	61.349	66.432	74.009	86.097	48.666	90.000
39	0.000	67.524	65.703	60.513	58.891	61.500	66.594	73.915	85.910	13.587	90.000
37	0.000	68.533	66.527	61.115	59.067	61.698	66.832	74.122	-85.599	-4.799	90.000
35	0.000	69.714	67.523	61.876	59.439	62.015	67.169	74.655	-77.440	-10.810	90.000
33	0.000	71.015	68.624	62.736	59.948	62.464	67.599	75.387	-73.348	-17.337	90.000
31	0.000	72.469	69.845	63.689	60.552	62.989	68.070	76.094	-74.845	-30.093	90.000
29	0.000	74.170	71.232	64.733	61.216	63.516	68.510	76.541	-80.505	-50.130	90.000
27	0.000	76.249	72.864	65.900	61.960	64.076	68.904	76.695	-85.186	-63.530	90.000
25	0.000	78.862	74.861	67.201	62.811	64.744	69.375	76.887	-86.668	-65.411	90.000
23	0.000	82.295	77.267	68.580	63.707	65.461	69.955	77.141	-86.697	-62.350	90.000
21	0.000	87.033	80.133	69.942	64.542	66.121	70.533	77.337	-85.840	-54.866	90.000
19	0.000	-86.663	83.339	71.030	65.054	66.498	70.909	77.359	-84.528	-43.522	90.000
17	0.000	-79.435	86.144	71.153	64.604	66.034	70.652	76.826	-83.343	-31.931	90.000
15	0.000	-74.070	86.336	68.651	61.911	63.615	68.664	74.649	-83.998	-24.517	90.000
13	0.000	-79.378	79.030	61.595	56.126	58.537	63.750	68.904	88.619	-24.294	90.000
11	0.000	71.299	63.169	52.924	50.245	53.838	58.762	61.741	69.260	86.873	90.000
9	0.000	48.616	50.799	47.643	47.033	51.488	56.463	58.403	57.541	46.193	90.000
7	0.000	41.948	45.136	45.300	45.759	50.637	55.657	57.333	54.601	46.413	90.000
5	0.000	40.944	43.173	44.476	45.426	50.495	55.502	57.132	54.104	48.274	90.000
3	0.000	41.311	42.628	44.243	45.385	50.517	55.499	57.062	54.078	49.239	90.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000

RELATIVE FLOW ANGLE CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000
77	0.000	56.690	57.515	57.298	58.079	61.050	61.367	56.155	61.094	64.577	90.000
75	0.000	55.885	53.439	57.478	58.815	62.247	61.402	54.896	62.378	65.159	90.000
73	0.000	54.526	56.119	57.883	62.864	68.345	61.448	51.506	63.989	65.890	90.000
71	0.000	52.383	52.514	59.084	50.328	48.636	61.468	38.589	65.933	66.760	90.000
69	0.000	49.815	50.713	44.010	54.627	55.454	61.663	-75.370	68.261	67.714	90.000
67	0.000	48.696	50.210	55.701	56.369	57.931	62.828	74.401	70.819	68.617	90.000
65	0.000	50.207	51.518	57.249	58.021	60.086	64.410	70.566	72.634	68.907	90.000
63	0.000	53.224	53.646	58.195	59.119	61.077	65.359	70.639	72.881	68.111	90.000
61	0.000	56.198	55.624	58.585	59.557	61.193	65.672	71.347	71.699	66.883	90.000
59	0.000	58.491	57.286	58.638	59.593	61.044	65.727	71.898	70.284	66.005	90.000
57	0.000	60.149	58.674	58.530	59.437	60.898	65.723	72.284	69.198	65.637	90.000
55	0.000	61.405	59.808	58.379	59.210	60.808	65.719	72.618	68.670	65.736	90.000
53	0.000	62.330	60.722	58.281	58.984	60.770	65.732	72.902	68.803	66.215	90.000
51	0.000	63.009	61.476	58.252	58.800	60.769	65.770	73.056	69.555	66.923	90.000
49	0.000	63.549	62.101	58.313	58.653	60.792	65.829	73.132	70.763	67.604	90.000
47	0.000	64.023	62.635	58.460	58.537	60.832	65.910	73.099	72.394	68.015	90.000
45	0.000	64.502	63.133	58.681	58.449	60.898	66.001	73.015	73.123	67.382	90.000
43	0.000	65.018	63.626	58.955	58.379	60.987	66.111	72.900	70.157	65.038	90.000
41	0.000	65.596	64.139	59.304	58.339	61.087	66.253	72.837	30.714	59.558	90.000
39	0.000	66.490	64.862	59.844	58.418	61.249	66.436	72.952	-59.081	46.166	90.000
37	0.000	67.576	65.758	60.493	58.625	61.460	66.695	73.413	-55.282	31.247	90.000
35	0.000	68.688	66.706	61.214	58.977	61.779	67.042	74.135	-53.268	20.518	90.000
33	0.000	69.814	67.659	61.948	59.391	62.180	67.445	74.950	-54.999	12.626	90.000
31	0.000	70.991	68.644	62.683	59.812	62.585	67.836	75.631	-62.166	2.601	90.000
29	0.000	72.280	69.693	63.404	60.195	62.919	68.135	75.958	-73.121	-16.123	90.000
27	0.000	73.748	70.841	64.091	60.538	63.217	68.337	75.948	-81.687	-36.494	90.000
25	0.000	75.324	72.071	64.620	60.752	63.463	68.525	75.914	-85.635	-44.758	90.000
23	0.000	77.030	73.294	64.749	60.626	63.461	68.591	75.725	-87.385	-41.620	90.000
21	0.000	78.601	74.197	64.066	59.831	62.906	68.243	75.058	-88.371	-31.450	90.000
19	0.000	77.988	73.667	61.896	57.854	61.289	66.925	73.340	-89.980	-18.363	90.000
17	0.000	69.704	69.337	57.704	54.388	58.193	63.935	69.490	84.692	-16.429	90.000
15	0.000	53.970	60.413	52.527	50.481	54.619	59.923	63.781	71.976	79.414	90.000
13	0.000	44.399	51.735	48.602	47.837	52.351	57.321	59.881	60.627	48.434	90.000
11	0.000	41.544	46.596	46.301	46.436	51.209	56.092	58.173	56.402	48.147	90.000
9	0.000	41.365	44.262	45.101	45.800	50.700	55.537	57.465	55.522	50.813	90.000
7	0.000	42.147	43.551	44.613	45.635	50.613	55.415	57.288	55.755	53.734	90.000
5	0.000	42.951	43.450	44.457	45.647	50.682	55.465	57.252	56.162	56.062	90.000
3	0.000	43.533	43.512	44.403	45.666	50.721	55.499	57.178	56.506	57.674	90.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000

TABLE B2.—Continued.

RELATIVE FLOW ANGLE

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000
77	0.000	50.562	50.311	48.368	48.191	54.415	58.888	72.231	66.054	64.762	90.000
75	0.000	50.309	50.262	48.772	49.117	54.779	59.345	74.056	66.112	64.805	90.000
73	0.000	49.762	50.019	49.092	50.020	55.167	59.783	79.424	66.016	64.750	90.000
71	0.000	48.828	49.501	49.300	50.718	55.489	60.076	-71.331	65.608	64.432	90.000
69	0.000	47.500	48.644	49.369	51.234	55.750	60.279	32.579	64.778	63.608	90.000
67	0.000	45.964	47.477	49.286	51.627	55.979	60.479	48.201	63.666	62.012	90.000
65	0.000	44.757	46.369	49.091	51.963	56.261	60.776	51.388	62.595	59.704	90.000
63	0.000	44.321	45.794	48.933	52.378	56.738	61.272	52.762	61.688	57.274	90.000
61	0.000	44.641	45.808	48.880	52.768	57.272	61.843	54.174	60.872	55.164	90.000
59	0.000	45.439	46.239	48.924	53.052	57.704	62.364	55.610	60.048	53.459	90.000
57	0.000	46.423	46.925	49.035	53.231	57.988	62.798	56.931	59.086	51.973	90.000
55	0.000	47.376	47.743	49.172	53.302	58.149	63.154	58.160	57.838	50.483	90.000
53	0.000	48.167	48.586	49.327	53.254	58.202	63.438	59.351	56.187	48.859	90.000
51	0.000	48.705	49.354	49.498	53.078	58.126	63.650	60.530	54.068	47.049	90.000
49	0.000	49.024	50.100	49.676	52.802	58.000	63.814	61.724	51.476	45.067	90.000
47	0.000	48.978	50.649	49.761	52.421	57.836	63.938	62.985	48.530	42.990	90.000
45	0.000	48.551	50.857	49.794	51.985	57.616	64.015	64.333	45.401	40.953	90.000
43	0.000	47.722	50.660	49.742	51.466	57.296	64.034	65.689	42.360	39.177	90.000
41	0.000	46.361	50.072	49.566	50.820	56.818	63.960	66.907	39.843	37.927	90.000
39	0.000	44.185	48.897	49.146	49.990	56.127	63.702	67.841	38.850	37.775	90.000
37	0.000	42.149	47.671	48.623	49.180	55.286	63.145	68.086	41.248	40.910	90.000
35	0.000	40.346	46.584	48.159	48.479	54.429	62.286	67.680	46.620	47.945	90.000
33	0.000	38.794	45.637	47.772	47.892	53.645	61.246	66.701	55.642	60.221	90.000
31	0.000	37.586	44.841	47.450	47.411	52.961	60.233	65.589	85.194	83.167	90.000
29	0.000	36.809	44.207	47.179	47.029	52.391	59.341	63.917	18.852	-50.096	90.000
27	0.000	36.532	43.739	46.948	46.740	51.952	58.574	62.430	37.043	-4.818	90.000
25	0.000	36.772	43.435	46.746	46.539	51.636	57.959	61.154	43.716	18.110	90.000
23	0.000	37.455	43.280	46.558	46.420	51.433	57.489	60.197	47.857	31.232	90.000
21	0.000	38.499	43.260	46.357	46.367	51.329	57.151	59.529	51.024	40.345	90.000
19	0.000	39.787	43.368	46.124	46.350	51.290	56.910	59.089	53.523	47.396	90.000
17	0.000	41.225	43.619	45.864	46.341	51.273	56.712	58.823	55.400	52.510	90.000
15	0.000	42.691	44.018	45.640	46.354	51.273	56.558	58.742	56.861	55.781	90.000
13	0.000	43.940	44.515	45.543	46.433	51.338	56.515	58.865	58.083	57.440	90.000
11	0.000	44.758	44.975	45.583	46.573	51.470	56.590	59.076	59.164	58.318	90.000
9	0.000	45.221	45.300	45.671	46.704	51.602	56.688	59.245	60.103	59.493	90.000
7	0.000	45.467	45.493	45.750	46.795	51.691	56.758	59.357	60.796	60.901	90.000
5	0.000	45.587	45.593	45.804	46.847	51.723	56.797	59.418	61.203	61.958	90.000
3	0.000	45.651	45.651	45.825	46.856	51.703	56.777	59.431	61.396	62.486	90.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000

RELATIVE FLOW ANGLE

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000
77	0.000	40.072	0.148	40.802	43.997	52.272	58.531	49.506	64.145	63.782	90.000
75	0.000	39.892	40.065	40.797	44.043	52.277	58.583	55.052	63.923	63.623	90.000
73	0.000	39.491	39.857	40.730	44.057	52.258	58.627	57.813	63.219	63.248	90.000
71	0.000	38.760	39.457	40.582	44.052	52.203	58.641	59.274	61.405	62.358	90.000
69	0.000	37.601	38.734	40.299	44.018	52.099	58.604	60.073	57.330	60.345	90.000
67	0.000	36.043	37.620	39.828	43.928	51.972	58.505	60.459	50.017	56.275	90.000
65	0.000	34.405	36.301	39.176	43.766	51.863	58.350	60.616	41.659	50.322	90.000
63	0.000	33.110	35.158	38.488	43.567	51.754	58.189	60.792	36.773	44.947	90.000
61	0.000	32.319	34.418	37.953	43.386	51.634	58.072	61.099	35.593	41.305	90.000
59	0.000	31.932	34.072	37.632	43.226	51.508	57.988	61.431	35.789	38.850	90.000
57	0.000	31.773	34.026	37.506	43.081	51.398	57.911	61.694	36.613	37.422	90.000
55	0.000	31.686	34.180	37.548	42.942	51.293	57.826	61.825	37.856	36.840	90.000
53	0.000	31.548	34.426	37.736	42.824	51.188	57.724	61.750	39.527	36.919	90.000
51	0.000	31.295	34.712	38.067	42.730	50.916	57.589	61.424	41.776	37.571	90.000
49	0.000	30.909	35.060	38.506	42.647	50.596	57.434	60.828	45.050	38.859	90.000
47	0.000	30.670	35.421	38.969	42.540	50.286	57.270	60.033	51.297	41.321	90.000
45	0.000	30.729	35.634	39.412	42.462	50.031	57.108	59.189	69.345	46.879	90.000
43	0.000	30.925	35.778	39.874	42.488	49.852	56.949	58.431	-28.839	66.292	90.000
41	0.000	31.305	36.055	40.439	42.658	49.747	56.807	57.871	16.427	-12.946	90.000
39	0.000	31.868	36.483	41.012	42.910	49.705	56.724	57.619	28.066	19.670	90.000
37	0.000	32.655	37.152	41.584	43.252	49.777	56.705	57.667	34.740	28.537	90.000
35	0.000	33.353	37.721	42.040	43.567	49.893	56.733	57.868	39.502	33.468	90.000
33	0.000	34.154	38.286	42.437	43.879	50.042	56.790	58.107	43.192	37.291	90.000
31	0.000	35.030	38.841	42.788	44.188	50.216	56.865	58.336	46.227	40.815	90.000
29	0.000	35.965	39.395	43.099	44.493	50.412	56.951	58.559	48.942	44.154	90.000
27	0.000	36.940	39.947	43.373	44.794	50.626	57.044	58.746	51.289	47.245	90.000
25	0.000	37.923	40.504	43.608	45.086	50.854	57.143	58.904	53.387	50.097	90.000
23	0.000	38.958	41.083	43.803	45.361	51.088	57.242	59.048	55.305	52.800	90.000
21	0.000	40.058	41.692	43.965	45.617	51.317	57.336	59.189	56.950	55.486	90.000
19	0.000	41.195	42.333	44.116	45.862	51.540	57.424	59.359	58.221	57.798	90.000
17	0.000	42.304	42.980	44.287	46.123	51.774	57.533	59.614	59.137	59.616	90.000
15	0.000	43.247	43.561	44.490	46.415	52.037	57.697	59.966	59.681	60.674	90.000
13	0.000	43.876	43.987	44.702	46.704	52.309	57.906	60.341	60.020	60.780	90.000
11	0.000	44.180	44.228	44.867	46.919	52.545	58.085	60.642	60.478	60.503	90.000
9	0.000	44.294	44.346	44.977	47.057	52.697	58.209	60.843	61.117	60.690	90.000
7	0.000	44.329	44.406	45.040	47.137	52.782	58.283	60.964	61.710	61.336	90.000
5	0.000	44.329	44.429	45.058	47.166	52.813	58.306	61.023	62.091	61.986	90.000
3	0.000	44.325	44.435	45.062	47.178	52.827	58.301	61.039	62.279	62.410	90.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000

TABLE B2.—Continued.

RELATIVE FLOW ANGLE

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000
77	0.000	28.794	29.225	31.149	36.335	45.289	52.606	59.993	54.952	57.600	90.000
75	0.000	28.629	29.159	31.126	36.320	45.216	52.533	59.504	54.027	56.986	90.000
73	0.000	28.315	29.027	31.081	36.302	45.136	52.449	59.019	52.074	56.078	90.000
71	0.000	27.782	28.795	31.017	36.289	45.072	52.358	58.542	48.137	54.988	90.000
69	0.000	26.936	28.364	30.909	36.280	45.031	52.260	58.013	40.315	53.833	90.000
67	0.000	25.760	27.649	30.722	36.278	45.024	52.160	57.380	27.301	52.211	90.000
65	0.000	24.391	26.690	30.414	36.300	45.076	52.091	56.653	16.254	48.841	90.000
63	0.000	23.166	25.741	30.051	36.359	45.227	52.094	55.922	16.549	44.159	90.000
61	0.000	22.398	25.103	29.813	36.447	45.486	52.207	55.262	22.068	38.536	90.000
59	0.000	22.085	24.895	29.815	36.571	45.828	52.419	54.588	25.217	29.525	90.000
57	0.000	22.130	25.054	30.059	36.752	46.234	52.705	53.850	-30.046	14.039	90.000
55	0.000	22.424	25.472	30.502	36.987	46.675	53.043	53.112	43.624	-17.434	90.000
53	0.000	22.867	26.068	31.103	37.285	47.109	53.406	52.474	40.607	-73.819	90.000
51	0.000	23.378	26.799	31.860	37.655	47.399	53.790	52.108	39.962	73.220	90.000
49	0.000	23.833	27.639	32.741	38.069	47.649	54.171	52.048	40.304	60.689	90.000
47	0.000	24.278	28.543	33.714	38.497	47.867	54.535	52.338	41.409	55.319	90.000
45	0.000	25.012	29.358	34.662	38.956	48.102	54.886	52.970	42.982	52.691	90.000
43	0.000	25.985	30.191	35.586	39.504	48.390	55.239	53.857	44.727	51.233	90.000
41	0.000	27.073	31.139	36.526	40.156	48.725	55.599	54.870	46.546	50.590	90.000
39	0.000	28.422	32.324	37.517	40.888	49.076	55.968	55.881	48.337	50.465	90.000
37	0.000	29.581	33.311	38.286	41.501	49.379	56.272	56.751	49.857	50.629	90.000
35	0.000	30.686	34.197	38.884	42.005	49.638	56.531	57.466	51.263	51.144	90.000
33	0.000	31.749	34.984	39.352	42.426	49.863	56.749	58.010	52.555	51.946	90.000
31	0.000	32.754	35.680	39.727	42.786	50.062	56.933	58.436	53.760	52.970	90.000
29	0.000	33.702	36.309	40.036	43.104	50.241	57.083	58.783	54.904	54.129	90.000
27	0.000	34.600	36.887	40.288	43.384	50.403	57.198	59.071	56.031	55.336	90.000
25	0.000	35.454	37.435	40.487	43.626	50.544	57.276	59.296	57.169	56.553	90.000
23	0.000	36.339	37.995	40.639	43.831	50.658	57.311	59.459	58.316	57.863	90.000
21	0.000	37.264	38.575	40.765	44.013	50.750	57.302	59.583	59.334	59.276	90.000
19	0.000	38.174	39.142	40.886	44.199	50.844	57.275	59.697	60.067	60.659	90.000
17	0.000	38.958	39.628	41.009	44.406	50.971	57.273	59.832	60.428	61.837	90.000
15	0.000	39.501	39.952	41.121	44.617	51.134	57.322	60.014	60.342	62.360	90.000
13	0.000	39.767	40.077	41.194	44.786	51.300	57.396	60.237	59.985	61.847	90.000
11	0.000	39.827	40.074	41.242	44.907	51.429	57.474	60.442	59.798	60.752	90.000
9	0.000	39.785	40.024	41.275	44.982	51.504	57.534	60.595	59.927	59.960	90.000
7	0.000	39.719	39.978	41.297	45.022	51.537	57.569	60.691	60.208	59.717	90.000
5	0.000	39.661	39.937	41.300	45.038	51.555	57.580	60.742	60.445	59.827	90.000
3	0.000	39.623	39.913	41.308	45.053	51.567	57.584	60.769	60.601	60.017	90.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000

RELATIVE FLOW ANGLE

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000
77	0.000	14.318	49.543	27.577	34.387	44.185	49.790	54.565	-21.370	51.818	90.000
75	0.000	11.720	31.065	26.823	33.645	43.245	49.298	53.989	-57.223	49.681	90.000
73	0.000	44.852	25.650	26.299	33.061	42.401	48.827	53.411	-83.704	46.634	90.000
71	0.000	22.535	23.726	26.069	32.744	41.830	48.507	52.965	80.571	42.729	90.000
69	0.000	20.819	22.844	26.084	32.707	41.562	48.379	52.673	72.179	39.140	90.000
67	0.000	20.123	22.344	26.308	32.959	41.618	48.462	52.521	66.777	40.996	90.000
65	0.000	19.481	21.899	26.627	33.542	42.086	48.854	52.642	62.431	49.090	90.000
63	0.000	18.877	21.448	26.915	34.408	43.108	49.861	53.550	58.987	32.846	90.000
61	0.000	18.599	21.230	27.194	35.259	44.431	51.086	53.653	55.309	89.676	90.000
59	0.000	18.801	21.449	27.579	35.877	45.531	51.857	52.717	56.336	85.925	90.000
57	0.000	19.473	22.076	28.122	36.326	46.405	52.396	52.171	58.939	84.495	90.000
55	0.000	20.462	22.983	28.795	36.699	47.130	52.850	52.001	60.295	82.120	90.000
53	0.000	21.587	24.041	29.566	37.050	47.577	53.240	52.001	60.481	79.496	90.000
51	0.000	22.700	25.153	30.444	37.433	47.816	53.590	52.124	59.944	76.759	90.000
49	0.000	23.681	26.265	31.430	37.864	48.046	53.934	52.442	58.928	73.830	90.000
47	0.000	24.397	27.372	32.475	38.342	48.242	54.267	52.891	57.683	70.704	90.000
45	0.000	24.986	28.344	33.511	38.843	48.403	54.577	53.408	56.385	67.483	90.000
43	0.000	25.706	29.167	34.422	39.334	48.549	54.866	53.975	55.217	64.297	90.000
41	0.000	26.681	30.054	35.249	39.848	48.704	55.137	54.584	54.364	61.339	90.000
39	0.000	27.869	31.128	36.138	40.423	48.874	55.393	55.218	53.990	59.133	90.000
37	0.000	28.865	32.002	36.828	40.890	49.028	55.593	55.786	53.868	57.648	90.000
35	0.000	29.758	32.746	37.357	41.282	49.165	55.742	56.284	53.937	56.651	90.000
33	0.000	30.624	33.428	37.780	41.623	49.294	55.852	56.702	54.161	56.054	90.000
31	0.000	31.455	34.050	38.125	41.922	49.417	55.930	57.039	54.523	55.809	90.000
29	0.000	32.218	34.601	38.400	42.182	49.534	55.976	57.277	54.973	55.854	90.000
27	0.000	32.929	35.095	38.608	42.406	49.643	55.996	57.440	55.480	56.108	90.000
25	0.000	33.639	35.561	38.744	42.587	49.735	55.988	57.546	56.051	56.461	90.000
23	0.000	34.390	36.029	38.817	42.727	49.802	55.955	57.601	56.735	56.913	90.000
21	0.000	35.174	36.505	38.852	42.849	49.852	55.901	57.602	57.405	57.628	90.000
19	0.000	35.908	36.937	38.872	42.992	49.922	55.864	57.574	57.882	58.656	90.000
17	0.000	36.417	37.197	38.860	43.161	50.038	55.876	57.554	58.009	59.740	90.000
15	0.000	36.573	37.183	38.783	43.310	50.190	55.933	57.582	57.629	60.196	90.000
13	0.000	36.452	36.950	38.661	43.401	50.344	56.002	57.672	56.876	59.417	90.000
11	0.000	36.209	36.652	38.548	43.450	50.466	56.065	57.791	56.205	57.755	90.000
9	0.000	35.960	36.396	38.470	43.472	50.539	56.115	57.905	55.866	56.197	90.000
7	0.000	35.768	36.225	38.426	43.476	50.571	56.151	57.991	55.830	55.304	90.000
5	0.000	35.642	36.126	38.392	43.476	50.589	56.170	58.044	55.970	55.016	90.000
3	0.000	35.583	36.076	38.382	43.487	50.603	56.183	58.078	56.139	55.047	90.000
1	0.000	0.000	-83.743	0.000	0.000	0.000	-73.013	-66.093	-66.375	-69.066	90.000

TABLE B2.—Continued.

RELATIVE FLOW ANGLE CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	37.755	38.124	39.170	44.495	51.260	56.999	59.062	56.536	57.772	90.000
77	0.000	37.732	38.131	39.230	44.583	51.369	57.137	59.186	56.721	57.898	90.000
75	0.000	37.692	38.168	39.480	44.919	51.749	57.508	59.522	56.992	58.091	90.000
73	0.000	37.618	38.296	40.085	45.694	52.484	58.082	60.064	57.179	58.092	90.000
71	0.000	37.391	38.422	40.859	46.853	53.424	58.675	60.909	57.263	57.666	90.000
69	0.000	35.666	37.121	40.681	47.790	53.979	58.782	62.503	57.269	56.222	90.000
67	0.000	28.882	30.461	37.372	46.774	52.909	57.636	64.356	59.263	54.501	90.000
65	0.000	24.750	26.500	34.153	44.067	50.786	55.961	63.413	66.501	66.461	90.000
63	0.000	24.602	25.904	32.468	41.941	49.427	54.745	60.253	69.733	81.329	90.000
61	0.000	24.133	25.252	31.162	40.369	48.741	54.008	57.750	70.174	83.795	90.000
59	0.000	23.511	24.808	30.376	39.226	48.366	53.595	56.311	70.011	83.663	90.000
57	0.000	23.281	24.768	30.062	38.499	48.240	53.417	55.413	69.343	82.741	90.000
55	0.000	23.545	25.109	30.113	38.103	48.258	53.395	54.769	68.244	81.272	90.000
53	0.000	24.080	25.690	30.419	37.942	48.203	53.463	54.268	66.947	79.603	90.000
51	0.000	24.731	26.395	30.925	37.973	48.069	53.589	53.881	65.495	77.779	90.000
49	0.000	25.393	27.141	31.603	38.156	48.064	53.765	53.639	63.831	75.708	90.000
47	0.000	25.891	27.866	32.414	38.457	48.145	53.977	53.594	61.963	73.297	90.000
45	0.000	26.092	28.525	33.308	38.860	48.247	54.195	53.650	60.027	70.557	90.000
43	0.000	26.388	29.091	34.127	39.284	48.348	54.415	53.833	58.192	67.589	90.000
41	0.000	27.000	29.795	34.859	39.719	48.455	54.629	54.110	56.637	64.503	90.000
39	0.000	27.968	30.763	35.631	40.191	48.579	54.839	54.478	55.593	61.830	90.000
37	0.000	28.801	31.587	36.282	40.609	48.719	55.013	54.869	54.928	59.826	90.000
35	0.000	29.579	32.307	36.797	40.969	48.846	55.148	55.266	54.543	58.341	90.000
33	0.000	30.352	32.969	37.218	41.288	48.970	55.252	55.642	54.381	57.298	90.000
31	0.000	31.120	33.592	37.571	41.582	49.095	55.331	55.974	54.412	56.634	90.000
29	0.000	31.871	34.164	37.875	41.859	49.225	55.392	56.256	54.607	56.293	90.000
27	0.000	32.621	34.685	38.136	42.125	49.364	55.437	56.483	54.928	56.218	90.000
25	0.000	33.402	35.193	38.353	42.382	49.514	55.472	56.669	55.366	56.503	90.000
23	0.000	34.250	35.741	38.549	42.645	49.680	55.513	56.834	55.985	56.519	90.000
21	0.000	35.238	36.405	38.791	42.972	49.909	55.606	57.009	56.733	57.116	90.000
19	0.000	36.348	37.186	39.136	43.457	50.314	55.875	57.285	57.511	58.334	90.000
17	0.000	37.391	37.932	39.471	43.970	50.896	56.474	57.865	58.372	60.206	90.000
15	0.000	37.979	38.296	39.506	44.210	51.142	56.852	58.502	58.684	61.628	90.000
13	0.000	38.318	38.432	39.457	44.357	51.198	56.905	58.686	57.787	60.819	90.000
11	0.000	38.376	38.456	39.416	44.503	51.337	57.047	58.942	57.298	59.765	90.000
9	0.000	38.197	38.342	39.348	44.561	51.378	57.103	59.015	56.991	58.961	90.000
7	0.000	37.995	38.222	39.260	44.521	51.305	57.043	59.032	56.731	58.373	90.000
5	0.000	37.870	38.156	39.187	44.479	51.252	57.043	59.219	56.812	58.287	90.000
3	0.000	37.390	38.132	39.151	44.459	51.224	57.008	59.078	56.465	57.771	90.000
1	0.000	37.759	38.133	39.170	44.496	51.262	56.938	58.976	56.510	57.743	90.000

RELATIVE FLOW ANGLE CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000
77	0.000	60.951	57.512	57.893	58.283	60.816	61.401	56.067	58.999	64.268	90.000
75	0.000	58.124	57.364	58.000	58.773	62.328	58.723	54.755	60.867	65.063	90.000
73	0.000	55.663	57.855	58.101	60.131	59.170	69.431	51.151	62.887	65.871	90.000
71	0.000	51.456	61.438	57.888	43.053	61.525	67.381	33.795	65.146	66.768	90.000
69	0.000	48.025	33.099	54.719	57.170	63.168	68.406	-88.537	67.717	67.890	90.000
67	0.000	49.308	51.280	62.389	59.746	63.764	68.968	74.132	70.574	69.211	90.000
65	0.000	53.137	54.934	62.712	61.469	62.587	67.710	73.025	72.989	69.994	90.000
63	0.000	56.919	57.286	63.015	61.966	61.386	66.395	73.622	73.391	69.217	90.000
61	0.000	59.827	58.911	62.685	61.796	60.753	65.908	74.050	71.633	67.475	90.000
59	0.000	61.803	60.192	62.125	61.420	60.462	65.702	74.215	69.678	66.260	90.000
57	0.000	63.089	61.271	61.584	61.027	60.341	65.628	74.283	68.816	66.162	90.000
55	0.000	64.011	62.154	61.121	60.686	60.284	65.627	74.351	69.344	67.132	90.000
53	0.000	64.686	62.897	60.805	60.398	60.253	65.660	74.356	71.419	68.965	90.000
51	0.000	65.158	63.504	60.594	60.157	60.235	65.715	74.238	74.889	71.285	90.000
49	0.000	65.539	64.018	60.521	59.956	60.230	65.775	74.002	79.233	73.507	90.000
47	0.000	65.892	64.463	60.559	59.788	60.241	65.852	73.611	84.350	75.168	90.000
45	0.000	66.263	64.880	60.690	59.647	60.266	65.942	73.144	88.649	75.213	90.000
43	0.000	66.664	65.299	60.917	59.539	60.306	66.042	72.678	89.687	72.728	90.000
41	0.000	67.166	65.769	61.238	59.459	60.368	66.161	72.312	82.897	67.117	90.000
39	0.000	67.994	66.469	61.762	59.478	60.473	66.324	72.234	56.605	57.409	90.000
37	0.000	69.085	67.386	62.455	59.633	60.618	66.540	72.623	27.237	46.295	90.000
35	0.000	70.351	68.475	63.310	59.974	60.862	66.837	73.509	15.142	38.559	90.000
33	0.000	71.740	69.667	64.274	60.463	61.224	67.213	74.713	9.742	34.585	90.000
31	0.000	73.287	70.982	65.333	61.059	61.651	67.632	75.908	4.245	32.551	90.000
29	0.000	75.102	72.470	66.491	61.718	62.067	68.012	76.644	-7.200	29.724	90.000
27	0.000	77.331	74.224	67.787	62.460	62.500	68.320	76.852	-21.765	25.379	90.000
25	0.000	80.148	76.369	69.232	63.310	63.019	68.682	77.117	-33.620	20.423	90.000
23	0.000	83.894	78.963	70.784	64.206	63.556	69.106	77.430	-38.029	19.160	90.000
21	0.000	89.121	82.077	72.359	65.044	63.998	69.478	77.636	-39.592	19.800	90.000
19	0.000	-83.885	85.600	73.721	65.560	64.105	69.632	77.673	-40.992	19.498	90.000
17	0.000	-75.782	88.826	74.191	65.108	63.342	69.092	77.135	-41.965	17.908	90.000
15	0.000	-69.177	89.610	71.970	62.378	60.765	66.906	74.968	-42.149	18.755	90.000
13	0.000	-72.500	82.737	64.520	56.460	56.240	62.180	69.193	-45.344	28.349	90.000
11	0.000	76.089	65.667	54.550	50.408	52.766	58.061	61.558	89.019	56.905	90.000
9	0.000	48.925	51.649	48.299	47.087	51.081	56.217	57.832	51.041	-60.078	90.000
7	0.000	41.437	45.247	45.501	45.756	50.504	55.565	56.648	47.334	-36.237	90.000
5	0.000	40.421	43.057	44.494	45.403	50.451	55.455	56.414	46.920	-70.621	90.000
3	0.000	40.857	42.452	44.197	45.353	50.489	55.453	56.349	46.161	79.477	90.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000

TABLE B2.—Continued.

RELATIVE FLOW ANGLE

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000
77	0.000	56.741	57.225	57.258	57.927	61.590	61.050	55.630	61.793	64.701	90.000
75	0.000	55.891	51.510	57.369	58.484	65.164	60.741	54.730	62.929	65.222	90.000
73	0.000	54.465	53.858	57.580	60.765	45.488	49.887	52.234	64.346	65.886	90.000
71	0.000	52.136	51.754	57.915	44.881	55.150	62.726	43.706	65.955	66.643	90.000
69	0.000	49.184	49.366	59.045	54.384	56.709	62.298	-50.756	67.763	67.409	90.000
67	0.000	47.621	48.735	55.223	56.386	58.540	63.133	75.342	69.661	67.962	90.000
65	0.000	48.976	50.310	57.698	58.253	59.901	64.226	70.550	71.016	67.810	90.000
63	0.000	52.051	52.708	58.704	59.501	60.261	64.868	70.575	71.084	66.815	90.000
61	0.000	55.174	54.868	59.187	60.035	60.125	65.097	71.199	70.409	65.852	90.000
59	0.000	57.718	56.668	59.372	60.158	59.981	65.174	71.690	70.116	65.713	90.000
57	0.000	59.581	58.204	59.391	60.084	59.925	65.229	72.049	70.671	66.479	90.000
55	0.000	61.000	59.510	59.344	59.920	59.917	65.289	72.316	72.141	67.952	90.000
53	0.000	62.101	60.636	59.307	59.728	59.925	65.357	72.418	74.537	69.885	90.000
51	0.000	62.914	61.546	59.249	59.532	59.938	65.435	72.342	77.444	71.805	90.000
49	0.000	63.577	62.314	59.287	59.361	59.956	65.518	72.086	80.420	73.237	90.000
47	0.000	64.160	62.973	59.418	59.216	59.987	65.614	71.686	82.796	73.654	90.000
45	0.000	64.710	63.564	59.645	59.099	60.029	65.722	71.268	83.269	72.342	90.000
43	0.000	65.270	64.129	59.967	59.012	60.082	65.838	70.945	80.455	68.941	90.000
41	0.000	65.941	64.745	60.391	58.956	60.151	65.970	70.818	72.450	63.263	90.000
39	0.000	66.915	65.572	61.006	58.994	60.260	66.147	71.083	57.442	55.091	90.000
37	0.000	68.098	66.576	61.753	59.172	60.412	66.380	71.835	41.431	46.749	90.000
35	0.000	69.300	67.619	62.569	59.489	60.657	66.684	72.971	30.773	41.072	90.000
33	0.000	70.513	68.662	63.401	59.882	60.972	67.035	74.268	24.686	38.561	90.000
31	0.000	71.784	69.736	64.232	60.290	61.285	67.381	75.404	20.389	38.265	90.000
29	0.000	73.189	70.884	65.054	60.662	61.517	67.631	75.993	13.554	38.223	90.000
27	0.000	74.810	72.145	65.847	60.995	61.704	67.759	76.076	2.174	36.394	90.000
25	0.000	76.590	73.519	66.484	61.197	61.830	67.856	76.183	-13.154	32.505	90.000
23	0.000	78.606	74.923	66.718	61.054	61.702	67.807	76.112	-22.362	31.456	90.000
21	0.000	80.641	76.051	66.109	60.232	61.041	67.308	75.494	-28.060	32.459	90.000
19	0.000	80.466	75.705	63.896	58.207	59.423	65.887	73.784	-33.224	34.179	90.000
17	0.000	71.640	71.242	59.373	54.649	56.631	62.963	69.888	-43.232	38.120	90.000
15	0.000	54.020	61.582	53.579	50.619	53.696	59.359	63.955	-81.973	55.257	90.000
13	0.000	43.769	52.112	49.123	47.869	51.918	57.079	59.690	58.561	-2.995	90.000
11	0.000	40.996	46.599	46.512	46.437	51.009	55.982	57.739	51.792	30.468	90.000
9	0.000	40.992	44.150	45.154	45.774	50.607	55.477	56.940	51.786	40.281	90.000
7	0.000	41.924	43.433	44.595	45.601	50.564	55.368	56.722	52.788	46.842	90.000
5	0.000	42.825	43.351	44.409	45.613	50.650	55.421	56.673	53.620	52.123	90.000
3	0.000	43.461	43.429	44.344	45.629	50.689	55.449	56.617	54.174	56.262	90.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000

RELATIVE FLOW ANGLE

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000
77	0.000	50.414	50.091	45.664	46.168	55.903	60.145	79.037	66.050	64.801	90.000
75	0.000	50.097	50.028	46.711	47.961	56.005	60.250	85.238	66.110	64.853	90.000
73	0.000	49.450	49.731	47.507	49.423	56.113	60.355	-71.874	66.037	64.840	90.000
71	0.000	48.380	49.095	48.005	50.487	56.226	60.441	11.115	65.750	64.638	90.000
69	0.000	46.841	48.044	48.205	51.268	56.345	60.524	40.614	65.273	64.086	90.000
67	0.000	45.016	46.596	48.148	51.870	56.482	60.637	46.593	64.803	62.965	90.000
65	0.000	43.471	45.136	47.936	52.355	56.766	60.907	48.160	64.440	61.167	90.000
63	0.000	42.715	44.248	47.754	52.887	57.184	61.356	49.263	63.978	58.991	90.000
61	0.000	42.809	44.071	47.751	53.377	57.563	61.847	50.936	63.248	56.898	90.000
59	0.000	43.506	44.428	47.906	53.738	57.802	62.275	52.714	62.196	55.045	90.000
57	0.000	44.508	45.120	48.138	53.956	57.901	62.622	54.297	60.766	53.277	90.000
55	0.000	45.584	46.002	48.379	54.041	57.899	62.896	55.731	58.910	51.448	90.000
53	0.000	46.574	46.970	48.627	53.990	57.831	63.117	57.152	56.618	49.505	90.000
51	0.000	47.369	47.918	48.898	53.800	57.722	63.286	58.560	53.929	47.451	90.000
49	0.000	47.882	48.766	49.182	53.493	57.586	63.420	60.016	50.963	45.345	90.000
47	0.000	48.073	49.575	49.464	53.077	57.411	63.521	61.588	47.891	43.289	90.000
45	0.000	47.860	50.160	49.621	52.555	57.173	63.585	63.264	44.887	41.400	90.000
43	0.000	47.235	50.310	49.666	51.941	56.837	63.599	64.968	42.102	39.797	90.000
41	0.000	45.991	49.939	49.601	51.207	56.348	63.525	66.566	39.750	38.600	90.000
39	0.000	43.666	48.812	49.306	50.277	55.634	63.278	67.886	38.587	38.200	90.000
37	0.000	41.417	47.525	48.855	49.396	54.803	62.746	68.577	39.920	40.214	90.000
35	0.000	39.459	46.370	48.419	48.645	53.985	61.921	68.664	43.416	45.289	90.000
33	0.000	37.837	45.370	48.028	48.017	53.261	60.930	68.180	49.015	54.379	90.000
31	0.000	36.619	44.533	47.688	47.504	52.643	59.988	67.215	57.796	69.191	90.000
29	0.000	35.891	43.872	47.391	47.098	52.138	59.160	65.775	79.317	-86.576	90.000
27	0.000	35.717	43.391	47.126	46.790	51.757	58.461	64.053	-8.365	-49.219	90.000
25	0.000	36.090	43.088	46.883	46.570	51.488	57.905	62.366	30.715	-10.066	90.000
23	0.000	36.914	42.949	46.650	46.431	51.320	57.477	60.971	41.436	16.303	90.000
21	0.000	38.085	42.955	46.407	46.360	51.239	57.162	59.934	47.146	32.441	90.000
19	0.000	39.468	43.103	46.139	46.329	51.220	56.931	59.221	50.942	43.152	90.000
17	0.000	40.984	43.401	45.852	46.310	51.221	56.733	58.780	53.618	50.353	90.000
15	0.000	42.517	43.852	45.610	46.318	51.233	56.568	58.613	55.613	54.685	90.000
13	0.000	43.814	44.397	45.506	46.396	51.306	56.512	58.715	57.234	56.779	90.000
11	0.000	44.662	44.888	45.544	46.537	51.442	56.575	58.941	58.641	57.838	90.000
9	0.000	45.145	45.236	45.632	46.671	51.576	56.677	59.129	59.861	59.271	90.000
7	0.000	45.407	45.444	45.711	46.764	51.666	56.745	59.254	60.759	60.948	90.000
5	0.000	45.536	45.552	45.766	46.818	51.700	56.783	59.325	61.283	62.184	90.000
3	0.000	45.597	45.606	45.782	46.824	51.678	56.761	59.349	61.531	62.804	90.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000

TABLE B2.—Continued.

RELATIVE FLOW ANGLE

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000
77	0.000	40.093	40.129	40.568	43.872	52.479	58.908	58.297	64.251	63.854	90.000
75	0.000	39.872	40.015	40.555	43.916	52.474	58.921	59.176	64.005	63.683	90.000
73	0.000	39.413	39.757	40.471	43.952	52.454	58.921	59.902	63.254	63.305	90.000
71	0.000	38.599	39.260	40.277	43.998	52.411	58.897	60.428	61.289	62.432	90.000
69	0.000	37.300	38.382	39.900	44.045	52.331	58.833	60.766	56.901	60.531	90.000
67	0.000	35.523	37.038	39.274	44.057	52.244	58.714	60.924	49.719	56.894	90.000
65	0.000	33.587	35.419	38.428	43.994	52.187	58.549	60.960	43.096	51.866	90.000
63	0.000	31.962	33.960	37.531	43.858	52.156	58.396	61.038	40.241	47.444	90.000
61	0.000	30.868	32.947	36.804	43.741	52.098	58.266	61.271	39.754	44.425	90.000
59	0.000	30.268	32.397	36.354	43.639	52.000	58.147	61.613	40.175	42.501	90.000
57	0.000	30.028	32.234	36.170	43.534	51.871	58.028	61.978	41.049	41.544	90.000
55	0.000	30.001	32.372	36.207	43.410	51.710	57.895	62.276	42.163	41.311	90.000
53	0.000	30.065	32.714	36.434	43.286	51.499	57.744	62.386	43.534	41.637	90.000
51	0.000	30.116	33.164	36.846	43.157	51.184	57.574	62.234	45.419	42.519	90.000
49	0.000	30.096	33.700	37.414	43.016	50.845	57.408	61.825	48.309	44.185	90.000
47	0.000	30.014	34.398	38.085	42.863	50.532	57.239	61.169	53.391	47.254	90.000
45	0.000	30.085	34.947	38.740	42.725	50.272	57.075	60.362	64.272	53.333	90.000
43	0.000	30.354	35.298	39.403	42.679	50.072	56.924	59.560	-84.901	67.437	90.000
41	0.000	30.722	35.616	40.121	42.772	49.929	56.802	58.918	-20.474	-69.942	90.000
39	0.000	31.330	36.111	40.867	42.995	49.863	56.742	58.544	11.510	-9.098	90.000
37	0.000	32.093	36.769	41.501	43.306	49.912	56.745	58.455	25.210	14.122	90.000
35	0.000	32.873	37.389	42.000	43.610	50.012	56.792	58.515	33.133	24.010	90.000
33	0.000	33.769	38.008	42.418	43.911	50.147	56.865	58.615	38.576	30.244	90.000
31	0.000	34.727	38.612	42.779	44.209	50.308	56.953	58.704	42.734	35.360	90.000
29	0.000	35.732	39.208	43.095	44.504	50.489	57.049	58.783	46.207	39.984	90.000
27	0.000	36.758	39.795	43.373	44.797	50.689	57.148	58.872	49.228	44.139	90.000
25	0.000	37.785	40.385	43.612	45.085	50.905	57.247	58.943	51.812	47.847	90.000
23	0.000	38.859	40.988	43.810	45.360	51.130	57.342	59.009	54.108	51.252	90.000
21	0.000	39.988	41.620	43.973	45.617	51.352	57.428	59.100	56.118	54.582	90.000
19	0.000	41.149	42.280	44.124	45.865	51.568	57.501	59.251	57.654	57.385	90.000
17	0.000	42.273	42.942	44.291	46.128	51.797	57.591	59.513	58.754	59.521	90.000
15	0.000	43.228	43.537	44.493	46.421	52.056	57.739	59.895	59.406	60.714	90.000
13	0.000	43.860	43.968	44.698	46.707	52.326	57.937	60.304	59.803	60.765	90.000
11	0.000	44.166	44.213	44.859	46.920	52.561	58.109	60.628	60.321	60.408	90.000
9	0.000	44.280	44.331	44.967	47.058	52.713	58.227	60.842	61.025	60.601	90.000
7	0.000	44.314	44.391	45.030	47.138	52.795	58.296	60.968	61.666	61.282	90.000
5	0.000	44.313	44.415	45.049	47.167	52.824	58.317	61.029	62.075	61.957	90.000
3	0.000	44.307	44.418	45.052	47.177	52.834	58.310	61.047	62.282	62.399	90.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000

RELATIVE FLOW ANGLE

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000
77	0.000	28.809	29.243	31.223	36.488	45.069	52.254	58.559	55.983	57.671	90.000
75	0.000	28.623	29.149	31.184	36.475	45.023	52.224	58.289	55.483	57.217	90.000
73	0.000	28.281	28.977	31.112	36.463	44.985	52.191	58.019	54.508	56.594	90.000
71	0.000	27.717	28.684	30.995	36.466	44.986	52.163	57.737	52.827	55.959	90.000
69	0.000	26.824	28.166	30.786	36.481	45.042	52.143	57.401	50.311	55.480	90.000
67	0.000	25.566	27.326	30.439	36.512	45.178	52.139	56.975	47.572	54.892	90.000
65	0.000	24.037	26.171	29.937	36.570	45.621	52.173	56.463	46.302	53.290	90.000
63	0.000	22.588	24.972	29.357	36.665	45.756	52.275	55.919	47.809	50.934	90.000
61	0.000	21.580	24.103	28.910	36.791	46.148	52.452	55.357	51.608	48.122	90.000
59	0.000	21.082	23.713	28.748	36.942	46.556	52.695	54.694	57.073	44.514	90.000
57	0.000	21.041	23.764	28.888	37.137	46.966	52.985	53.937	67.877	41.106	90.000
55	0.000	21.360	24.170	29.288	37.373	47.377	53.317	53.216	-75.076	37.661	90.000
53	0.000	21.931	24.851	29.894	37.654	47.759	53.671	52.669	-2.338	25.975	90.000
51	0.000	22.646	25.733	30.697	37.985	47.994	54.024	52.370	20.344	48.571	90.000
49	0.000	23.381	26.764	31.697	38.341	48.108	54.371	52.301	28.204	43.545	90.000
47	0.000	23.950	27.867	32.865	38.713	48.362	54.711	52.563	32.837	43.172	90.000
45	0.000	24.645	28.910	34.063	39.115	48.552	55.051	53.197	36.577	43.717	90.000
43	0.000	25.595	29.848	35.202	39.613	48.783	55.396	54.088	39.857	44.490	90.000
41	0.000	26.719	30.839	36.321	40.247	49.056	55.749	55.089	42.812	45.492	90.000
39	0.000	28.106	32.146	37.473	40.990	49.363	56.111	56.059	45.442	46.494	90.000
37	0.000	29.346	33.203	38.290	41.594	49.626	56.412	56.856	47.542	47.381	90.000
35	0.000	30.550	34.121	38.910	42.090	49.852	56.667	57.520	49.361	48.418	90.000
33	0.000	31.678	34.938	39.397	42.507	50.050	56.879	58.021	50.987	49.669	90.000
31	0.000	32.723	35.663	39.790	42.867	50.228	57.056	58.404	52.466	51.104	90.000
29	0.000	33.700	36.315	40.110	43.183	50.390	57.200	58.713	53.841	52.641	90.000
27	0.000	34.608	36.904	40.366	43.461	50.537	57.310	58.972	55.164	54.197	90.000
25	0.000	35.470	37.459	40.563	43.700	50.665	57.383	59.187	56.497	55.729	90.000
23	0.000	36.360	38.021	40.707	43.900	50.768	57.413	59.357	57.848	57.339	90.000
21	0.000	37.287	38.599	40.820	44.075	50.848	57.397	59.497	59.045	59.030	90.000
19	0.000	38.199	39.163	40.927	44.251	50.929	57.360	59.644	59.911	60.614	90.000
17	0.000	38.986	39.646	41.037	44.446	51.041	57.348	59.821	60.343	61.893	90.000
15	0.000	39.525	39.966	41.138	44.646	51.191	57.387	60.041	60.234	62.385	90.000
13	0.000	39.788	40.088	41.205	44.808	51.345	57.451	60.278	59.835	61.760	90.000
11	0.000	39.844	40.083	41.251	44.922	51.466	57.514	60.479	59.645	60.575	90.000
9	0.000	39.798	40.033	41.283	44.993	51.534	57.562	60.626	59.809	59.786	90.000
7	0.000	39.729	39.986	41.306	45.031	51.562	57.593	60.720	60.130	59.601	90.000
5	0.000	39.669	39.945	41.309	45.046	51.576	57.602	60.771	60.391	59.753	90.000
3	0.000	39.631	39.921	41.317	45.059	51.585	57.603	60.798	60.560	59.973	90.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000

TABLE B2.—Concluded.

RELATIVE FLOW ANGLE CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.000
77	0.000	16.279	-39.932	28.031	35.553	43.724	48.457	53.176	46.632	51.494	90.000
75	0.000	15.648	40.323	27.238	34.696	42.884	48.145	52.705	44.988	50.177	90.000
73	0.000	9.888	27.104	26.683	34.007	42.166	47.882	52.252	41.329	48.527	90.000
71	0.000	24.079	24.056	26.412	33.590	41.737	47.768	51.921	33.414	47.310	90.000
69	0.000	20.786	22.843	26.320	33.451	41.631	47.846	51.725	11.024	48.558	90.000
67	0.000	20.000	22.213	26.373	33.607	41.864	48.149	51.630	-79.732	55.606	90.000
65	0.000	19.311	21.635	26.471	34.109	42.484	48.751	51.737	47.765	67.032	90.000
63	0.000	18.551	20.961	26.496	34.956	43.585	49.879	52.544	31.225	77.302	90.000
61	0.000	18.006	20.462	26.504	35.817	44.893	51.186	52.518	30.030	85.269	90.000
59	0.000	17.919	20.426	26.663	36.404	45.986	52.057	51.634	39.549	85.073	90.000
57	0.000	18.383	20.874	27.052	36.795	46.913	52.664	51.198	48.413	83.219	90.000
55	0.000	19.289	21.700	27.638	37.102	47.744	53.156	51.166	52.820	80.053	90.000
53	0.000	20.461	22.785	28.374	37.380	48.311	53.570	51.367	54.425	76.661	90.000
51	0.000	21.736	24.027	29.267	37.692	48.587	53.942	51.801	54.662	73.152	90.000
49	0.000	22.963	25.329	30.329	38.053	48.779	54.282	52.341	54.281	69.685	90.000
47	0.000	23.986	26.637	31.541	38.452	48.903	54.586	52.891	53.607	66.411	90.000
45	0.000	24.676	27.858	32.826	38.903	48.980	54.869	53.449	52.829	63.352	90.000
43	0.000	25.401	28.853	34.007	39.387	49.039	55.136	54.037	52.150	60.516	90.000
41	0.000	26.416	29.856	35.069	39.924	49.109	55.380	54.646	51.770	58.103	90.000
39	0.000	27.590	30.964	36.087	40.519	49.217	55.615	55.247	51.800	56.457	90.000
37	0.000	28.714	31.950	36.850	41.007	49.326	55.793	55.775	52.017	55.381	90.000
35	0.000	29.726	32.776	37.422	41.410	49.427	55.924	56.233	52.366	54.708	90.000
33	0.000	30.657	33.489	37.867	41.753	49.526	56.017	56.614	52.834	54.398	90.000
31	0.000	31.514	34.118	38.224	42.051	49.623	56.080	56.930	53.415	54.414	90.000
29	0.000	32.283	34.671	38.507	42.311	49.720	56.116	57.163	54.065	54.705	90.000
27	0.000	32.995	35.166	38.718	42.533	49.813	56.126	57.332	54.751	55.186	90.000
25	0.000	33.701	35.629	38.851	42.710	49.891	56.110	57.453	55.496	55.751	90.000
23	0.000	34.445	36.090	38.916	42.842	49.942	56.070	57.534	56.359	56.421	90.000
21	0.000	35.226	36.559	38.938	42.951	49.975	56.010	57.573	57.193	57.344	90.000
19	0.000	35.962	36.986	38.943	43.076	50.024	55.965	57.590	57.771	58.526	90.000
17	0.000	36.472	37.241	38.915	43.225	50.120	55.967	57.612	57.934	59.693	90.000
15	0.000	36.624	37.219	38.822	43.354	50.253	56.012	57.671	57.537	60.145	90.000
13	0.000	36.495	36.977	38.685	43.426	50.389	56.066	57.774	56.751	59.289	90.000
11	0.000	36.243	36.673	38.560	43.458	50.496	56.118	57.896	56.085	57.561	90.000
9	0.000	35.989	36.415	38.471	43.469	50.559	56.160	58.008	55.803	56.027	90.000
7	0.000	35.792	36.242	38.424	43.466	50.584	56.191	58.092	55.838	55.214	90.000
5	0.000	35.665	36.143	38.399	43.462	50.596	56.208	58.144	56.032	55.016	90.000
3	0.000	35.606	36.094	38.391	43.467	50.604	56.216	58.177	56.233	55.110	90.000
1	0.000	0.000	-83.820	0.000	0.000	0.000	-73.663	-64.439	-67.316	-71.177	90.000

RELATIVE FLOW ANGLE CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	38.067	38.435	39.536	44.898	51.252	56.899	59.641	57.444	58.609	90.000
77	0.000	38.043	38.435	39.573	44.961	51.347	57.033	59.735	57.593	58.694	90.000
75	0.000	38.005	38.457	39.803	45.274	51.720	57.387	60.010	57.879	58.885	90.000
73	0.000	37.939	38.566	40.427	46.072	52.450	57.906	60.473	58.153	58.948	90.000
71	0.000	37.760	38.748	41.308	47.359	53.370	58.355	61.206	58.371	58.656	90.000
69	0.000	36.230	37.702	41.394	48.672	53.858	58.155	62.657	58.655	57.486	90.000
67	0.000	29.188	30.792	38.145	48.253	52.689	56.776	64.475	60.192	55.166	90.000
65	0.000	24.213	26.080	34.509	45.527	50.642	55.314	63.487	66.866	64.960	90.000
63	0.000	23.982	25.337	32.511	43.153	49.434	54.397	60.128	68.939	81.455	90.000
61	0.000	23.421	24.518	30.867	41.364	48.869	53.883	57.493	68.104	82.669	90.000
59	0.000	22.570	23.842	29.758	40.005	48.623	53.640	55.918	67.394	82.135	90.000
57	0.000	22.117	23.601	29.201	39.090	48.643	53.591	54.901	66.536	81.070	90.000
55	0.000	22.272	23.837	29.100	38.548	48.817	53.658	54.182	65.315	79.461	90.000
53	0.000	22.823	24.415	29.324	38.273	48.915	53.783	53.676	63.836	77.551	90.000
51	0.000	23.598	25.215	29.809	38.216	48.864	53.946	53.386	62.119	75.295	90.000
49	0.000	24.478	26.141	30.527	38.325	48.856	54.148	53.350	60.238	72.672	90.000
47	0.000	25.286	27.092	31.460	38.544	48.872	54.348	53.426	58.393	69.825	90.000
45	0.000	25.788	28.014	32.550	38.886	48.881	54.546	53.571	56.698	66.932	90.000
43	0.000	26.156	28.797	33.656	39.311	48.879	54.737	53.788	55.209	64.071	90.000
41	0.000	26.790	29.603	34.651	39.784	48.893	54.922	54.083	54.057	61.357	90.000
39	0.000	27.735	30.590	35.561	40.291	48.955	55.105	54.446	53.396	59.183	90.000
37	0.000	28.693	31.533	36.295	40.732	49.039	55.251	54.823	53.063	57.606	90.000
35	0.000	29.583	32.342	36.865	41.113	49.128	55.361	55.201	52.958	56.467	90.000
33	0.000	30.434	33.065	37.324	41.446	49.220	55.443	55.555	53.045	55.717	90.000
31	0.000	31.236	33.711	37.703	41.748	49.319	55.502	55.872	53.302	55.313	90.000
29	0.000	31.998	34.291	38.025	42.030	49.426	55.546	56.155	53.703	55.206	90.000
27	0.000	32.752	34.819	38.297	42.300	49.546	55.577	56.395	54.209	55.344	90.000
25	0.000	33.540	35.336	38.522	42.558	49.677	55.600	56.608	54.820	55.626	90.000
23	0.000	34.395	35.889	38.722	42.822	49.824	55.630	56.814	55.622	56.037	90.000
21	0.000	35.398	36.561	38.967	43.152	50.033	55.711	57.040	56.554	56.835	90.000
19	0.000	36.533	37.356	39.322	43.648	50.419	55.962	57.382	57.490	58.255	90.000
17	0.000	37.618	38.139	39.686	44.190	50.975	56.526	58.063	58.512	60.332	90.000
15	0.000	38.247	38.549	39.759	44.479	51.201	56.844	58.814	59.043	61.987	90.000
13	0.000	38.611	38.715	39.739	44.656	51.237	56.857	59.072	58.331	61.337	90.000
11	0.000	38.680	38.761	39.727	44.830	51.358	56.970	59.392	57.985	60.410	90.000
9	0.000	38.504	38.653	39.687	44.920	51.395	57.008	59.518	57.781	59.705	90.000
7	0.000	38.303	38.538	39.624	44.911	51.318	56.945	59.569	57.599	59.186	90.000
5	0.000	38.182	38.476	39.570	44.893	51.264	56.938	59.782	57.731	59.150	90.000
3	0.000	37.708	38.453	39.540	44.882	51.232	56.904	59.661	57.394	58.632	90.000
1	0.000	38.071	38.443	39.536	44.899	51.254	56.834	59.552	57.420	58.582	90.000

TABLE B3.—FLOW/GRID DEVIATION VELOCITIES

FLOW CP	DEVIATION VELOCITY HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133.874
77	0.000	0.131	-50.644	-88.422	-81.900	-98.229	-106.289	-90.947	-40.202	-35.252	271.142
75	0.000	-0.053	-64.994	-130.937	-100.015	-116.834	-119.424	-123.416	-76.181	-79.133	271.142
73	0.000	-1.117	-51.754	-109.865	-50.930	-55.395	-46.869	-91.454	-97.756	-119.082	271.142
71	0.000	-3.445	-23.090	-54.387	-0.867	-0.436	2.146	-27.363	-104.302	-147.717	271.142
69	0.000	-7.164	-2.291	0.227	-0.211	0.800	4.809	5.703	-102.033	-165.803	271.142
67	0.000	-9.584	-4.136	2.096	3.339	5.987	9.565	7.463	-98.826	-174.065	271.142
65	0.000	-6.463	-3.077	6.596	8.813	11.328	12.814	11.922	-97.989	-176.837	271.142
63	0.000	0.807	0.891	10.321	11.772	11.933	14.071	16.813	-98.864	-178.113	271.142
61	0.000	7.728	5.153	11.332	12.171	10.612	13.767	19.857	-99.732	-178.252	271.142
59	0.000	12.514	8.830	10.935	11.694	9.581	13.208	21.361	-98.044	-175.552	271.142
57	0.000	15.526	11.781	10.299	11.222	9.214	12.946	22.038	-92.060	-169.131	271.142
55	0.000	17.563	14.071	9.899	10.962	9.273	12.969	22.383	-83.335	-159.174	271.142
53	0.005	19.079	16.011	9.914	10.919	9.555	13.192	22.681	-71.649	-145.471	271.142
51	-0.006	20.265	17.679	10.296	11.091	9.986	13.563	22.855	-56.445	-128.080	271.142
49	0.068	21.369	19.189	10.976	11.428	10.536	14.039	23.011	-39.126	-108.381	271.142
47	-0.036	22.554	20.643	11.931	11.926	11.196	14.604	23.053	-20.052	-87.227	271.142
45	0.180	23.915	22.149	13.133	12.581	11.999	15.254	23.041	-1.706	-66.828	271.142
43	0.478	25.549	23.823	14.578	13.410	12.974	16.013	23.042	15.249	-48.281	271.142
41	0.190	27.488	25.791	16.417	14.525	14.109	16.892	23.131	3.059	-28.775	271.142
39	0.216	30.124	28.375	18.996	16.216	15.545	17.955	23.452	5.066	-10.185	271.142
37	-0.012	32.987	31.338	21.895	18.264	17.173	19.258	24.376	58.338	-4.730	271.142
35	0.126	35.743	34.376	24.984	20.683	19.079	20.838	25.998	64.006	-1.751	271.142
33	-0.028	38.314	37.300	28.076	23.267	21.237	22.636	28.096	71.825	4.237	271.142
31	0.021	40.581	40.009	31.044	25.819	23.435	24.460	30.227	86.115	17.740	271.142
29	-0.006	42.458	42.441	33.756	28.121	25.364	26.002	31.806	108.273	40.421	271.142
27	0.000	44.000	44.680	36.221	30.160	26.980	27.058	32.481	126.052	57.816	271.142
25	0.000	45.164	46.790	38.374	31.950	28.441	27.886	32.876	133.688	60.493	271.142
23	0.000	45.966	48.760	39.968	33.264	29.559	28.566	33.117	136.424	55.718	271.142
21	0.000	46.510	50.433	40.589	33.798	30.044	28.810	32.766	136.036	45.466	271.142
19	0.000	131.219	51.297	39.706	33.017	29.424	28.185	31.571	134.842	32.852	271.142
17	0.000	106.424	49.517	36.343	30.009	26.827	25.977	28.910	132.486	21.038	271.142
15	0.000	80.325	42.325	29.310	23.680	21.080	20.856	23.505	126.817	12.863	271.142
13	0.000	58.789	28.863	18.856	14.653	12.617	12.293	14.070	15.451	9.863	271.142
11	0.000	11.015	14.579	9.236	6.491	5.356	4.808	4.340	5.100	3.052	271.142
9	0.000	2.289	5.418	3.662	2.189	1.803	1.315	-0.372	-2.121	-4.591	271.142
7	0.000	-1.274	0.848	1.022	0.395	0.452	0.019	-2.028	-4.693	-5.434	271.142
5	0.000	-1.603	-0.733	0.067	-0.052	0.215	-0.195	-2.095	-4.380	-3.607	271.142
3	0.000	-0.778	-0.681	-0.096	-0.051	0.164	-0.119	-1.417	-2.500	-1.544	271.142
1	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	136.168

FLOW CP	DEVIATION VELOCITY HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133.749
77	0.000	-0.075	-7.476	-53.721	-44.486	-56.932	-69.416	-53.669	-35.390	-39.592	270.965
75	0.000	-0.531	-0.134	-84.111	-56.522	-70.461	-90.458	-81.203	-72.685	-84.711	270.965
73	0.000	-1.742	-0.560	-76.706	-25.669	-32.043	-51.850	-70.127	-104.004	-125.429	270.965
71	0.000	-3.971	-1.457	-42.338	-1.046	-1.674	-0.017	-31.443	-125.165	-155.583	270.965
69	0.000	-7.282	-3.136	-0.592	-1.213	-1.791	-0.003	22.901	-136.750	-175.221	270.965
67	0.000	-10.421	-5.583	-0.503	-0.489	-0.673	1.318	4.209	-142.658	-186.640	270.965
65	0.000	-10.409	-6.815	0.665	2.396	3.559	5.195	5.656	-146.946	-192.976	270.965
63	0.000	-6.010	-4.841	3.071	6.084	7.306	8.969	8.768	-149.637	-197.318	270.965
61	0.000	0.312	-0.876	5.258	8.465	8.479	10.846	12.012	-149.565	-199.928	270.965
59	0.000	5.887	3.416	6.600	9.514	8.554	11.606	14.318	-145.564	-199.619	270.965
57	0.000	10.052	7.294	7.294	9.845	8.559	12.016	15.805	-138.037	-195.463	270.965
55	0.000	13.185	10.512	7.709	9.928	8.747	12.380	16.829	-127.490	-187.317	270.965
53	0.000	15.471	13.120	8.173	10.019	9.116	12.787	17.636	-114.425	-175.255	270.965
51	0.003	17.160	15.292	8.771	10.251	9.624	13.272	18.170	98.276	-159.524	270.965
49	-0.005	18.597	17.166	9.603	10.637	10.233	13.836	18.556	-80.241	-141.316	270.965
47	0.049	20.013	18.889	10.692	11.173	10.927	14.484	18.747	-60.630	-121.356	270.965
45	-0.004	21.563	20.617	12.036	11.862	11.732	15.193	18.884	-42.060	-101.667	270.965
43	-0.034	23.345	22.475	13.622	12.718	12.663	15.988	19.070	-23.944	-82.774	270.965
41	-0.009	25.381	24.570	15.558	13.833	13.718	16.904	19.438	-4.645	-63.056	270.965
39	-0.010	28.008	27.157	18.129	15.456	15.009	17.978	20.161	11.677	-45.595	270.965
37	0.017	30.559	29.874	20.823	17.336	16.434	19.255	21.519	20.244	-39.117	270.965
35	-0.004	32.674	32.342	23.448	19.399	18.051	20.752	23.453	28.106	-34.288	270.965
33	0.023	34.340	34.456	25.859	21.426	19.771	22.355	25.657	37.106	-27.733	270.965
31	-0.002	35.473	36.167	27.959	23.213	21.342	23.829	27.676	50.882	-15.908	270.965
29	0.000	36.010	37.462	29.653	24.588	22.494	24.847	28.927	70.489	2.475	270.965
27	0.000	35.943	38.358	30.889	25.544	23.263	25.286	29.212	87.683	17.601	270.966
25	0.000	34.980	38.711	31.404	25.893	23.633	25.371	29.159	98.520	22.701	270.965
23	0.000	32.927	38.385	30.789	25.255	23.203	24.897	28.539	103.342	18.855	270.965
21	0.000	29.526	36.976	28.540	23.181	21.482	23.349	26.703	105.748	10.945	270.965
19	0.000	23.967	33.365	24.098	19.148	17.841	19.945	22.927	108.223	2.732	270.965
17	0.000	15.462	26.099	17.476	13.190	12.076	14.038	16.149	12.515	1.273	270.965
15	0.000	6.048	16.231	10.398	7.093	6.048	7.171	7.464	6.731	1.813	270.965
13	0.000	-0.204	7.754	5.260	3.089	2.307	2.856	1.596	0.084	-4.548	270.965
11	0.000	-2.827	2.463	2.216	0.963	0.402	0.779	-1.158	-3.694	-7.358	270.965
9	0.000	-3.078	-0.171	0.569	-0.004	-0.459	-0.186	-2.363	-4.847	-6.304	270.965
7	0.000	-2.054	-0.911	-0.087	-0.194	-0.529	-0.356	-2.496	-4.260	-3.817	270.965
5	0.000	-0.976	-0.794	-0.211	-0.099	-0.296	-0.194	-2.129	-3.020	-1.780	270.965
3	0.000	-0.281	-0.400	-0.142	-0.029	-0.131	-0.079	-1.358	-1.493	-0.568	270.965
1	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	136.166

TABLE B3.—Continued.

FLOW DEVIATION VELOCITY CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	132.970
77	0.000	-0.239	-0.310	-0.399	-0.266	-0.698	-0.150	-10.831	-29.251	-39.160	269.453
75	0.000	-0.630	-0.669	-0.782	-0.521	-1.529	-0.272	-17.186	-56.353	-76.757	269.453
73	0.000	-1.325	-1.136	-1.077	-0.659	-2.310	-0.322	-15.395	-76.842	-104.650	269.453
71	0.000	-2.562	-1.884	-1.303	-0.661	-2.944	-0.312	-1.202	-89.546	-120.771	269.453
69	0.000	-4.588	-3.137	-1.545	-0.560	-3.476	-0.255	-1.355	-96.747	-128.742	269.453
67	0.000	-7.261	-5.018	-1.893	-0.364	-3.943	-0.112	-1.690	-101.953	-133.531	269.453
65	0.000	-9.683	-7.080	-2.404	-0.029	-4.277	0.252	-2.244	-107.611	-137.381	269.453
63	0.000	-10.936	-8.481	-2.989	0.644	-4.262	1.106	-2.873	-112.927	-139.015	269.453
61	0.000	-10.778	-8.885	-3.429	1.607	-3.694	2.438	-3.321	-115.999	-138.421	269.453
59	0.000	-9.506	-8.373	-3.584	2.643	-2.694	3.965	-3.463	-116.675	-136.501	269.453
57	0.000	-7.620	-7.130	-3.447	3.595	-1.540	5.432	-3.305	-115.289	-133.641	269.453
55	0.000	-5.599	-5.394	-3.088	4.331	-0.403	6.733	-2.884	-112.139	-129.937	269.453
53	0.000	-3.794	-3.447	-2.546	4.780	0.612	7.839	-2.245	-107.691	-125.582	269.453
51	0.000	-2.438	-1.581	-1.852	4.877	1.408	8.731	-1.410	-102.340	-120.793	269.453
49	0.000	-1.499	0.246	-1.052	4.666	2.151	9.453	-0.396	-96.202	-115.657	269.453
47	0.000	-1.179	1.671	-0.392	4.161	2.890	10.040	0.792	-89.302	-110.054	269.453
45	0.000	-1.431	2.427	0.188	3.558	3.617	10.497	2.144	-81.581	-103.818	269.453
43	0.000	-2.203	2.474	0.639	2.853	4.278	10.804	3.577	-72.997	-96.931	269.453
41	0.000	-3.584	1.935	0.938	1.977	4.818	10.887	4.945	-63.765	-89.232	269.453
39	0.000	-5.906	0.590	0.884	0.833	5.157	10.558	6.102	-55.666	-81.506	269.453
37	0.000	-8.106	-0.870	0.516	-0.325	5.046	9.579	6.697	-51.135	-77.877	269.453
35	0.000	-10.059	-2.144	0.170	-1.314	4.769	7.986	6.718	-46.222	-74.872	269.453
33	0.000	-11.766	-3.221	-0.080	-2.110	4.584	6.059	6.161	-35.996	-67.470	269.453
31	0.000	-13.174	-4.097	-0.240	-2.717	4.582	4.236	5.183	-15.874	-50.999	269.453
29	0.000	-14.221	-4.768	-0.330	-3.146	4.827	2.680	3.863	-4.422	-9.596	269.453
27	0.000	-14.813	-5.238	-0.362	-3.404	5.375	1.374	2.312	-7.056	-13.713	269.453
25	0.000	-14.860	-5.504	-0.352	-3.492	6.227	0.373	0.805	-8.972	-16.283	269.453
23	0.000	-14.239	-5.572	-0.329	-3.413	7.373	-0.342	-0.443	-9.903	-17.095	269.453
21	0.000	-12.964	-5.447	-0.342	-3.200	8.776	-0.791	-1.368	-9.839	-16.115	269.453
19	0.000	-11.058	-5.103	-0.436	-2.923	10.345	-1.045	-1.989	-9.013	-13.541	269.453
17	0.000	-8.585	-4.475	-0.608	-2.654	11.938	-1.233	-2.344	-7.725	-10.114	269.453
15	0.000	-5.777	-3.514	-0.749	-2.367	13.390	-1.369	-2.385	-6.137	-6.925	269.453
13	0.000	-3.234	-2.326	-0.684	-1.949	14.423	-1.295	-2.015	-4.405	-4.877	269.453
11	0.000	-1.538	-1.251	-0.407	-1.408	14.482	-0.973	-1.468	-2.761	-3.618	269.453
9	0.000	-0.620	-0.541	-0.121	-0.931	13.250	-0.628	-1.036	-1.454	-2.202	269.453
7	0.000	-0.180	-0.165	0.053	-0.597	11.146	-0.389	-0.737	-0.607	-0.742	269.453
5	0.000	-0.004	-0.006	0.113	-0.373	8.562	-0.241	-0.510	-0.176	0.132	269.453
3	0.000	0.035	0.033	0.077	-0.193	4.736	-0.147	-0.278	-0.021	0.262	269.453
1	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	135.537

FLOW DEVIATION VELOCITY CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	132.022
77	0.000	-0.282	-0.342	-0.427	-0.354	-0.225	-0.148	-0.147	-16.047	-25.360	267.386
75	0.000	-0.702	-0.736	-0.839	-0.693	-0.462	-0.293	-0.287	-29.831	-49.780	267.386
73	0.000	-1.432	-1.261	-1.209	-0.965	-0.673	-0.412	-0.385	-38.212	-66.706	267.386
71	0.000	-2.810	-2.157	-1.630	-1.186	-0.876	-0.512	-0.426	-39.759	-72.726	267.386
69	0.000	-5.196	-3.762	-2.264	-1.423	-1.124	-0.632	-0.435	-36.207	-70.887	267.386
67	0.000	-8.648	-6.324	-3.287	-1.749	-1.426	-0.810	-0.452	-31.546	-67.200	267.386
65	0.000	-12.483	-9.496	-4.796	-2.225	-1.744	-1.063	-0.487	-29.853	-66.014	267.386
63	0.000	-15.727	-12.445	-6.623	-2.864	-2.115	-1.365	-0.483	-32.822	-67.306	267.386
61	0.000	-17.910	-14.611	-8.369	-3.627	-2.585	-1.668	-0.394	-38.372	-68.375	267.386
59	0.000	-19.075	-15.890	-9.785	-4.452	-3.116	-1.945	-0.265	-43.586	-68.750	267.386
57	0.000	-19.516	-16.366	-10.789	-5.279	-3.610	-2.197	-0.144	-47.692	-68.596	267.386
55	0.000	-19.587	-16.234	-11.350	-6.089	-4.046	-2.438	-0.071	-50.159	-67.689	267.386
53	0.000	-19.607	-15.781	-11.460	-6.840	-4.524	-2.699	-0.096	-50.411	-65.495	267.386
51	0.000	-19.770	-15.225	-11.115	-7.477	-5.317	-2.996	-0.266	-47.764	-61.328	267.386
49	0.000	-20.192	-14.621	-10.412	-8.002	-6.057	-3.295	-0.630	-41.456	-54.540	267.386
47	0.000	-20.599	-13.996	-9.523	-8.442	-6.671	-3.575	-1.188	-31.740	-45.026	267.386
45	0.000	-20.578	-13.615	-8.608	-8.697	-7.146	-3.823	-1.883	-19.008	-33.143	267.386
43	0.000	-20.252	-13.375	-7.683	-8.694	-7.455	-4.040	-2.627	-3.009	-18.681	267.386
41	0.000	-19.607	-12.967	-6.637	-8.389	-7.593	-4.205	-3.312	-5.691	-3.687	267.386
39	0.000	-18.702	-12.353	-5.714	-7.986	-7.629	-4.243	-3.796	-8.419	-7.753	267.386
37	0.000	-17.487	-11.254	-4.736	-7.361	-7.443	-4.168	-4.035	-10.645	-11.627	267.386
35	0.000	-16.643	-10.611	-3.984	-6.783	-7.168	-4.009	-4.112	-12.133	-14.627	267.386
33	0.000	-15.774	-9.617	-3.350	-6.218	-6.831	-3.798	-4.114	-12.919	-16.398	267.386
31	0.000	-14.770	-8.842	-2.810	-5.665	-6.450	-3.553	-4.086	-13.116	-16.943	267.386
29	0.000	-13.594	-8.055	-2.352	-5.119	-6.030	-3.288	-4.025	-12.779	-16.537	267.386
27	0.000	-12.258	-7.252	-1.970	-4.583	-5.572	-3.008	-3.948	-12.012	-15.439	267.386
25	0.000	-10.795	-6.421	-1.669	-4.068	-5.086	-2.720	-3.845	-10.846	-13.800	267.386
23	0.000	-9.147	-5.528	-1.453	-3.598	-4.597	-2.434	-3.704	-9.328	-11.685	267.386
21	0.000	-7.278	-4.534	-1.304	-3.180	-4.135	-2.168	-3.519	-7.661	-9.068	267.386
19	0.000	-5.233	-3.421	-1.168	-2.776	-3.695	-1.922	-3.231	-6.070	-6.395	267.386
17	0.000	-3.186	-2.249	-0.968	-2.298	-3.201	-1.625	-2.728	-4.707	-4.038	267.386
15	0.000	-1.485	-1.198	-0.666	-1.698	-2.575	-1.187	-2.001	-3.748	-2.583	267.386
13	0.000	-0.450	-0.677	-0.328	-1.082	-1.866	-0.665	-1.247	-3.063	-2.344	267.386
11	0.000	-0.029	-0.120	-0.084	-0.631	-1.234	-0.259	-0.683	-2.303	-2.630	267.386
9	0.000	0.081	0.018	0.049	-0.357	-0.820	-0.027	-0.337	-1.425	-2.375	267.386
7	0.000	0.086	0.063	0.096	-0.209	-0.581	0.072	-0.149	-0.692	-1.481	267.386
5	0.000	0.056	0.057	0.079	-0.135	-0.415	0.079	-0.062	-0.262	-0.607	267.386
3	0.000	0.025	0.030	0.041	-0.066	-0.214	0.042	-0.025	-0.069	-0.140	267.386
1	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	134.538

TABLE B3.—Continued.

FLOW DEVIATION VELOCITY CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	131.107
77	0.000	0.072	0.129	0.217	0.163	0.136	0.168	0.199	-5.649	-12.044	265.277
75	0.000	-0.002	0.183	0.391	0.314	0.241	0.318	0.402	-10.538	-24.683	265.277
73	0.000	-0.403	0.057	0.449	0.403	0.277	0.411	0.576	-13.393	-34.101	265.277
71	0.000	-1.372	-0.371	0.380	0.435	0.260	0.436	0.676	-12.986	-37.179	265.277
69	0.000	-3.285	-1.414	0.123	0.411	0.210	0.397	0.666	-9.821	-35.593	265.277
67	0.000	-6.364	-3.425	-0.455	0.318	0.131	0.296	0.524	-6.220	-33.353	265.277
65	0.000	-10.244	-6.362	-1.521	0.151	0.050	0.147	0.245	-4.387	-32.154	265.277
63	0.000	-13.850	-9.439	-2.973	-0.084	0.034	-0.001	-0.130	-4.760	-30.214	265.277
61	0.000	-16.385	-11.802	-4.344	-0.384	0.151	-0.070	-0.540	-5.325	-24.973	265.277
59	0.000	-17.798	-13.134	-5.275	-0.719	0.412	-0.029	-1.017	-3.985	-17.297	265.277
57	0.000	-18.319	-13.560	-5.661	-1.018	0.805	0.127	-1.607	0.255	-8.574	265.277
55	0.000	-18.225	-13.331	-5.546	-1.255	1.268	0.381	-2.300	-0.625	0.634	265.277
53	0.000	-17.735	-12.667	-5.009	-1.387	1.765	0.698	-3.059	-1.758	10.688	265.277
51	0.000	-17.017	-11.698	-4.067	-1.368	1.914	1.071	-3.781	-3.073	1.545	265.277
49	0.000	-16.387	-10.543	-2.828	-1.252	1.854	1.439	-4.397	-4.421	0.262	265.277
47	0.000	-15.892	-9.345	-1.401	-1.123	1.638	1.756	-4.747	-5.602	-1.028	265.277
45	0.000	-15.070	-8.440	-0.166	-0.963	1.427	2.019	-4.731	-6.574	-2.341	265.277
43	0.000	-13.930	-7.636	0.821	-0.687	1.296	2.250	-4.378	-7.422	-3.811	265.277
41	0.000	-12.786	-6.823	1.628	-0.321	1.193	2.446	-3.799	-8.180	-5.470	265.277
39	0.000	-11.486	-5.727	2.352	0.077	1.046	2.614	-3.130	-8.780	-7.198	265.277
37	0.000	-10.480	-4.845	2.818	0.393	0.918	2.704	-2.504	-9.080	-8.566	265.277
35	0.000	-9.518	-4.044	3.086	0.609	0.790	2.750	-1.953	-9.033	-9.367	265.277
33	0.000	-8.549	-3.338	3.173	0.722	0.653	2.743	-1.537	-8.723	-9.579	265.277
31	0.000	-7.575	-2.734	3.128	0.763	0.503	2.688	-1.224	-8.210	-9.276	265.277
29	0.000	-6.599	-2.201	2.994	0.756	0.341	2.580	-0.987	-7.524	-8.575	265.277
27	0.000	-5.620	-1.724	2.788	0.701	0.162	2.412	-0.809	-6.643	-7.594	265.277
25	0.000	-4.630	-1.264	2.512	0.591	-0.052	2.177	-0.712	-5.548	-6.402	265.277
23	0.000	-3.512	-0.742	2.170	0.423	-0.316	1.870	-0.705	-4.256	-4.929	265.277
21	0.000	-2.252	-0.142	1.791	0.226	-0.619	1.485	-0.755	-2.996	-3.211	265.277
19	0.000	-0.984	0.452	1.415	0.064	-0.894	1.068	-0.798	-2.061	-1.472	265.277
17	0.000	0.023	0.874	1.075	-0.003	-1.034	0.715	-0.765	-1.632	-0.050	265.277
15	0.000	0.557	0.992	0.787	0.015	-0.981	0.509	-0.605	-1.787	0.472	265.277
13	0.000	0.647	0.821	0.548	0.049	-0.801	0.415	-0.352	-2.239	-0.275	265.277
11	0.000	0.497	0.551	0.387	0.081	-0.615	0.384	-0.119	-2.439	-1.762	265.277
9	0.000	0.297	0.322	0.288	0.094	-0.493	0.358	0.031	-2.172	-2.857	265.277
7	0.000	0.146	0.178	0.223	0.089	-0.414	0.318	0.101	-1.629	-2.903	265.277
5	0.000	0.055	0.085	0.152	0.065	-0.314	0.244	0.106	-1.064	-2.102	265.277
3	0.000	0.012	0.031	0.077	0.037	-0.165	0.132	0.066	-0.507	-1.041	265.277
1	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133.485

FLOW DEVIATION VELOCITY CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	130.479
77	0.000	-2.854	0.623	0.964	0.878	0.744	0.477	0.365	0.018	-5.270	263.715
75	0.000	-3.120	1.252	1.959	1.761	1.484	0.928	0.734	0.432	-10.950	263.715
73	0.000	0.943	1.860	2.840	2.48?	2.059	1.275	1.061	1.775	-14.214	263.715
71	0.000	1.078	2.461	3.651	3.064	2.466	1.517	1.310	0.999	-12.940	263.715
69	0.000	1.149	3.121	4.645	3.659	2.845	1.738	1.489	1.467	-8.917	263.715
67	0.000	0.815	3.569	5.912	4.424	3.367	2.035	1.623	1.704	-5.405	263.715
65	0.000	-0.397	3.184	7.152	5.499	4.232	2.547	1.795	1.554	-3.722	263.715
63	0.000	-2.293	1.844	7.906	6.936	5.725	3.680	2.343	1.246	-1.407	263.715
61	0.000	-3.947	0.412	8.155	8.509	7.760	5.266	2.503	0.804	1.260	263.715
59	0.000	-4.753	-0.289	8.312	9.864	9.773	6.549	1.907	1.114	3.495	263.715
57	0.000	-4.621	-0.161	8.666	10.889	11.545	7.587	1.402	1.953	5.839	263.715
55	0.000	-3.835	0.564	9.221	11.606	13.040	8.469	1.067	2.687	7.499	263.715
53	-0.001	-2.769	1.602	9.909	12.082	14.571	9.197	0.797	3.082	8.481	263.715
51	0.014	-1.762	2.701	10.756	12.353	15.884	9.730	0.592	3.121	8.929	263.715
49	-0.034	-1.088	3.701	11.771	12.439	16.405	10.121	0.555	2.858	8.939	263.715
47	0.146	-1.028	4.571	12.785	12.323	15.868	10.326	0.650	2.376	8.573	263.715
45	0.019	-1.309	4.994	13.515	11.886	14.672	10.285	0.820	1.677	7.820	263.715
43	0.324	-1.478	4.942	13.636	11.160	13.290	10.046	1.053	0.805	6.669	263.715
41	0.498	-1.359	4.844	13.315	10.365	11.916	9.637	1.348	-0.133	5.215	263.715
39	0.564	-1.026	4.978	12.961	9.601	10.567	9.102	1.697	-0.940	3.743	263.715
37	0.395	-0.761	5.045	12.453	8.812	9.357	8.526	2.041	-1.634	2.278	263.715
35	-0.053	-0.463	5.118	11.877	8.101	8.278	7.923	2.353	-2.169	0.903	263.715
33	-0.055	-0.059	5.238	11.267	7.449	7.310	7.296	2.595	-2.509	-0.253	263.715
31	0.047	0.400	5.348	10.608	6.813	6.422	6.647	2.741	-2.630	-1.069	263.715
29	-0.001	0.820	5.379	9.882	6.172	5.592	5.964	2.729	-2.571	-1.513	263.715
27	-0.005	1.210	5.344	9.087	5.519	4.805	5.251	2.582	-2.365	-1.637	263.715
25	-0.001	1.658	5.300	8.221	4.841	4.042	4.510	2.313	-1.991	-1.576	263.715
23	0.000	2.238	5.298	7.281	4.125	3.280	3.749	1.920	-1.370	-1.323	263.715
21	0.000	2.914	5.322	6.272	3.401	2.525	2.971	1.387	-0.714	-0.628	263.715
19	0.000	3.464	5.201	5.203	2.737	1.842	2.229	0.785	-0.351	0.561	263.715
17	0.000	3.511	4.660	4.076	2.177	1.314	1.612	0.252	-0.518	1.806	263.715
15	0.000	2.944	3.649	2.961	1.705	0.987	1.182	-0.067	-1.360	2.157	263.715
13	0.000	2.093	2.472	2.016	1.311	0.823	0.912	-0.145	-2.641	0.803	263.715
11	0.000	1.285	1.474	1.344	1.019	0.735	0.750	-0.088	-3.720	-1.911	263.715
9	0.000	0.678	0.788	0.918	0.813	0.657	0.646	0.000	-4.060	-4.484	263.715
7	0.000	0.300	0.392	0.654	0.650	0.563	0.562	0.061	-3.554	-5.408	263.715
5	0.000	0.098	0.183	0.439	0.476	0.434	0.442	0.078	-2.533	-4.475	263.715
3	0.000	0.020	0.067	0.221	0.254	0.237	0.247	0.054	-1.296	-2.447	263.715
1	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	132.700

TABLE B3.—Continued.

FLOW DEVIATION VELOCITY

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-9.148	15.111	16.438	14.446	13.457	11.488	9.298	8.267	3.508	5.605	263.057
77	-10.408	14.843	16.190	14.227	13.258	11.318	9.150	8.151	3.481	5.443	263.015
75	-8.241	14.339	15.734	13.831	12.956	11.050	8.871	7.939	3.328	5.082	263.015
73	-10.353	13.201	14.726	13.101	12.490	10.581	8.353	7.555	2.895	4.278	263.015
71	-8.103	10.723	12.408	11.626	11.599	9.656	7.415	6.920	2.132	2.852	263.015
69	2.179	6.254	7.779	8.995	10.032	8.094	6.007	6.118	1.233	1.009	263.015
67	-2.390	0.701	1.696	6.033	8.328	6.527	4.700	5.499	1.062	0.076	263.015
65	-0.138	-2.836	-2.030	4.542	7.486	5.982	4.206	5.191	2.492	1.965	263.015
63	3.323	-4.369	-3.814	3.221	6.803	5.890	3.925	4.373	4.507	5.742	263.015
61	-5.993	-6.068	-5.650	1.203	5.896	6.043	3.777	3.296	5.697	8.674	263.015
59	-1.339	-7.709	-6.918	-0.337	4.985	6.375	3.805	2.543	6.233	10.303	263.015
57	-0.139	-8.500	-7.281	-1.054	4.326	6.925	4.038	2.018	6.518	11.237	263.015
55	-1.153	-8.271	-6.772	-0.980	4.011	7.626	4.451	1.586	6.578	11.781	263.015
53	-4.562	-7.394	-5.642	-0.267	4.043	8.514	5.012	1.199	6.432	12.040	263.015
51	-10.158	-6.161	-4.141	0.998	4.426	9.511	5.662	0.873	6.076	12.038	263.015
49	-14.036	-4.814	-2.488	2.753	5.137	10.573	6.392	0.671	5.524	11.781	263.015
47	7.445	-3.734	-0.865	4.899	6.108	11.352	7.187	0.670	4.835	11.300	263.015
45	-12.902	-3.221	0.595	7.273	7.260	11.741	7.935	0.786	4.045	10.600	263.015
43	2.845	-2.630	1.826	9.374	8.337	11.924	8.631	1.069	3.174	9.647	263.015
41	-14.269	-1.501	3.365	11.202	9.418	12.133	9.269	1.509	2.298	8.465	263.015
39	-14.207	0.323	5.519	13.172	10.660	12.474	9.853	2.126	1.617	7.332	263.015
37	-13.655	1.938	7.403	14.794	11.699	12.810	10.328	2.848	1.087	6.237	263.015
35	-11.583	3.513	9.130	16.067	12.572	13.090	10.704	3.655	0.727	5.210	263.015
33	-8.831	5.173	10.813	17.125	13.358	13.353	11.006	4.503	0.571	4.329	263.015
31	-7.419	6.931	12.476	18.034	14.094	13.616	11.250	5.350	0.667	3.699	263.015
29	-12.191	8.768	14.061	18.822	14.795	13.888	11.451	6.176	1.031	3.396	263.015
27	-13.887	10.631	15.561	19.511	15.466	14.181	11.611	6.938	1.645	3.441	263.015
25	4.848	12.631	17.019	20.159	16.169	14.526	11.758	7.640	2.513	3.711	263.015
23	5.548	14.807	18.625	20.850	16.968	14.991	11.973	8.281	3.755	4.172	263.015
21	-0.733	17.215	20.434	21.642	17.930	15.677	12.358	8.847	5.235	5.282	263.015
19	-0.584	19.547	22.144	22.366	19.000	16.663	13.045	9.394	6.634	7.442	263.015
17	0.829	21.044	23.061	22.425	19.498	17.451	14.046	10.205	7.968	10.670	263.015
15	1.626	21.051	22.591	21.286	18.832	16.797	13.827	10.593	8.132	12.923	263.015
13	1.691	20.242	21.395	19.698	17.724	15.541	12.795	10.132	6.510	11.713	263.015
11	3.116	18.851	19.953	18.042	16.488	14.314	11.817	9.740	5.506	9.923	263.015
9	-4.212	17.446	18.617	16.617	15.340	13.179	10.870	9.229	4.768	8.304	263.015
7	-7.543	16.424	17.650	15.621	14.495	12.355	10.154	8.831	4.181	7.086	263.015
5	-16.424	15.781	17.042	15.009	13.957	11.851	9.804	8.882	4.223	6.884	263.013
3	-11.628	14.670	16.685	14.660	13.636	11.557	9.525	8.457	3.582	5.826	263.015
1	-10.396	15.123	16.459	14.461	13.461	11.407	9.210	8.137	3.484	5.576	263.806

FLOW DEVIATION VELOCITY

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133.778
77	0.000	0.150	-47.741	-91.941	-85.207	-79.745	-82.195	-74.185	-34.756	-34.506	271.018
75	0.000	0.025	-62.779	-143.547	-107.925	-54.802	-46.781	-102.329	-69.714	-74.879	271.018
73	0.000	-0.949	-54.578	-135.349	-62.832	-0.001	2.039	-78.838	-95.389	-108.855	271.018
71	0.000	-3.154	-33.527	-89.036	-0.823	1.859	4.595	-27.293	-113.520	-136.191	271.018
69	0.000	-6.812	-2.021	-23.996	-0.187	6.797	10.354	39.844	-124.254	-156.438	271.018
67	0.000	-9.627	-3.973	1.954	3.400	11.767	15.649	6.054	-129.050	-166.972	271.018
65	0.000	-7.240	-3.382	6.256	9.302	10.247	14.583	9.922	-130.303	-170.246	271.018
63	0.000	-0.428	0.330	10.820	12.685	7.463	12.023	14.123	-129.276	-170.960	271.018
61	0.000	6.661	4.661	13.023	13.476	6.211	11.188	16.795	-127.980	-171.965	271.018
59	0.000	11.834	8.546	13.465	13.276	5.962	10.992	18.107	-126.033	-172.849	271.018
57	0.000	15.196	11.803	13.249	12.921	6.199	11.164	18.709	-122.182	-171.782	271.018
55	0.000	17.576	14.436	12.940	12.703	6.615	11.556	18.997	-115.660	-167.321	271.018
53	0.005	19.330	16.640	12.887	12.656	7.111	12.054	19.116	-105.595	-158.717	271.018
51	-0.006	20.638	18.483	13.031	12.770	7.662	12.627	19.005	-92.333	-146.286	271.018
49	0.068	21.800	20.117	13.513	13.039	8.284	13.230	18.712	-78.245	-131.812	271.018
47	-0.036	23.001	21.638	14.307	13.461	9.000	13.904	18.233	-62.857	-116.520	271.018
45	0.180	24.352	23.173	15.406	14.040	9.815	14.647	17.687	-48.873	-102.551	271.018
43	0.478	25.936	24.843	16.854	14.832	10.758	15.462	17.209	-36.910	-90.837	271.018
41	0.190	27.898	26.828	18.714	15.901	11.882	16.388	16.952	-26.788	-80.786	271.018
39	0.216	30.576	29.488	21.300	17.491	13.273	17.502	17.178	-19.354	-72.046	271.018
37	-0.012	33.461	32.496	24.230	19.461	14.840	18.807	18.123	-18.060	-70.787	271.018
35	0.126	36.224	35.548	27.328	21.766	16.651	20.351	19.875	-19.128	-72.334	271.018
33	-0.028	38.779	38.461	30.426	24.263	18.699	22.096	22.221	-19.952	-73.814	271.018
31	0.021	41.002	41.134	33.381	26.745	20.779	23.878	24.687	-16.858	-71.158	271.018
29	-0.006	42.824	43.517	36.072	28.975	22.577	25.389	26.592	-5.710	-60.460	271.018
27	0.000	44.303	45.707	38.514	30.942	24.055	26.365	27.577	7.389	-49.135	271.018
25	0.000	45.387	47.767	40.632	32.654	25.367	27.049	28.435	19.733	-43.861	271.018
23	0.000	46.121	49.690	42.159	33.882	26.329	27.511	29.122	28.273	-47.831	271.018
21	0.000	46.634	51.396	42.741	34.328	26.648	27.473	29.165	36.114	-57.538	271.018
19	0.000	123.589	52.281	41.787	33.461	25.861	26.585	28.421	44.440	-65.043	271.018
17	0.000	98.428	50.458	38.320	30.375	23.138	24.075	26.265	49.018	-65.323	271.018
15	0.000	71.972	43.118	31.076	23.968	17.465	18.814	21.541	45.200	-62.985	271.018
13	0.000	50.184	29.401	20.180	14.649	9.565	10.452	13.002	35.167	-62.783	271.018
11	0.000	10.724	14.820	9.983	6.602	3.970	3.949	3.663	5.105	-48.285	271.018
9	0.000	2.086	5.502	4.025	2.236	1.214	0.962	-1.121	-3.127	-5.709	271.018
7	0.000	-1.379	0.858	1.161	0.387	0.243	-0.146	-2.798	-5.412	-5.264	271.018
5	0.000	-1.646	-0.754	0.080	-0.082	0.161	-0.282	-2.786	-4.605	-3.085	271.018
3	0.000	-0.793	-0.701	-0.118	-0.077	0.147	-0.174	-1.835	-2.460	-13.913	271.018
1	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	136.084

TABLE B3.—Continued.

FLOW CP	DEVIATION HUB	VELOCITY SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133.659
77	0.000	-0.063	-8.833	-61.081	-48.117	-42.368	-56.357	-44.871	-33.614	-37.005	270.842
75	0.000	-0.501	-0.096	-100.234	-64.202	-35.616	-58.655	-70.399	-70.123	-79.083	270.842
73	0.000	-1.690	-0.466	-103.018	-36.896	-1.455	-5.344	-64.857	-102.246	-116.871	270.842
71	0.000	-3.915	-1.357	-76.415	-0.968	-1.706	0.327	-34.891	-125.238	-143.983	270.842
69	0.000	-7.274	-3.019	-32.995	-1.113	-1.864	0.486	9.253	-141.036	-162.597	270.842
67	0.000	-10.762	-5.559	-0.257	-0.423	0.113	2.232	3.258	-151.390	-174.601	270.842
65	0.000	-11.465	-7.258	0.747	2.624	3.772	5.627	4.302	-157.582	-180.830	270.842
63	0.000	-7.797	-5.884	3.085	6.653	5.479	8.259	6.860	-160.547	-184.420	270.842
61	0.000	-1.756	-2.280	5.621	9.370	5.616	9.489	9.554	-160.884	-187.543	270.842
59	0.000	4.157	1.971	7.562	10.727	5.679	10.127	11.530	-158.362	-189.311	270.842
57	0.000	8.749	6.077	8.842	11.330	5.998	10.663	12.839	-152.681	-188.227	270.842
55	0.000	12.271	9.703	9.705	11.605	6.474	11.219	13.672	-143.802	-183.443	270.842
53	0.000	14.988	12.847	10.453	11.794	7.017	11.805	14.159	-131.545	-174.709	270.842
51	0.003	16.994	15.415	11.036	11.990	7.598	12.434	14.312	-117.363	-162.746	270.842
49	-0.005	18.654	17.605	11.780	12.294	8.230	13.097	14.169	-102.278	-148.994	270.842
47	0.049	20.205	19.541	12.754	12.739	8.935	13.817	13.830	-87.215	-134.802	270.842
45	-0.004	21.799	21.376	14.017	13.341	9.720	14.599	13.499	-73.343	-121.605	270.842
43	-0.034	23.580	23.269	15.618	14.142	10.604	15.444	13.343	-61.152	-110.066	270.842
41	-0.009	25.682	25.430	17.611	15.195	11.626	16.379	13.510	-50.699	-99.897	270.842
39	-0.010	28.320	28.107	20.210	16.697	12.862	17.489	14.238	-43.007	-91.159	270.842
37	0.017	30.891	30.880	22.943	18.477	14.218	18.770	15.659	-39.911	-88.087	270.842
35	-0.004	33.006	33.360	25.576	20.422	15.742	20.223	17.695	-38.973	-87.926	270.842
33	0.023	34.647	35.454	27.984	22.358	17.360	21.778	20.070	-38.444	-88.834	270.842
31	-0.002	35.726	37.120	30.060	24.069	18.828	23.224	22.313	-35.454	-87.376	270.842
29	0.000	36.196	38.359	31.723	25.369	19.873	24.223	23.817	-25.922	-79.485	270.842
27	0.000	36.052	39.192	32.919	26.249	20.559	24.604	24.492	-13.660	-69.740	270.842
25	0.000	34.981	39.487	33.372	26.518	20.817	24.580	25.033	-0.310	-64.048	270.842
23	0.000	32.814	39.115	32.671	25.794	20.319	23.977	25.012	9.218	-67.162	270.842
21	0.000	29.299	37.658	30.296	23.632	18.589	22.239	23.787	17.376	-74.796	270.842
19	0.000	23.596	33.919	25.648	19.510	15.092	18.703	20.726	24.735	-78.736	270.842
17	0.000	14.928	26.384	18.672	13.447	9.822	12.864	14.817	31.417	-71.731	270.842
15	0.000	5.464	16.215	11.143	7.232	4.664	6.476	6.865	45.428	-44.855	270.842
13	0.000	-0.664	7.598	5.648	3.140	1.599	2.530	1.144	-0.739	-6.569	270.842
11	0.000	-3.119	2.307	2.387	0.956	0.024	0.597	-1.715	-4.795	-8.274	270.842
9	0.000	-3.235	-0.290	0.617	-0.051	-0.673	-0.317	-2.958	-5.426	-6.053	270.842
7	0.000	-2.121	-0.988	-0.108	-0.251	-0.648	-0.463	-3.083	-4.306	-3.099	270.842
5	0.000	-1.001	-0.837	-0.256	-0.146	-0.360	-0.275	-2.636	-2.781	-1.103	270.842
3	0.000	-0.290	-0.418	-0.175	-0.059	-0.168	-0.132	-1.638	-1.266	-0.219	270.842
1	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	136.067

FLOW CP	DEVIATION HUB	VELOCITY SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	132.862
77	0.000	-0.244	-0.327	-0.427	-0.280	-1.041	-0.106	-5.012	-25.118	-34.408	269.330
75	0.000	-0.663	-0.720	-0.845	-0.532	-2.125	-0.179	-6.914	-49.113	-68.372	269.330
73	0.000	-1.421	-1.252	-1.170	-0.659	-2.979	-0.199	-0.867	-68.659	-94.746	269.330
71	0.000	-2.790	-2.122	-1.430	-0.628	-3.591	-0.179	-1.021	-82.468	-111.030	269.330
69	0.000	-5.036	-3.565	-1.717	-0.457	-4.071	-0.118	-1.240	-92.309	-120.427	269.330
67	0.000	-8.011	-5.704	-2.135	-0.150	-4.477	0.030	-1.692	-100.566	-127.187	269.330
65	0.000	-10.855	-8.119	-2.738	0.325	-4.709	0.479	-2.431	-108.041	-132.199	269.330
63	0.000	-12.655	-9.957	-3.468	1.167	-4.481	1.430	-3.311	-113.718	-134.377	269.330
61	0.000	-13.045	-10.814	-4.091	2.348	-3.741	2.741	-4.024	-116.912	-134.641	269.330
59	0.000	-12.202	-10.702	-4.404	3.624	-2.769	4.087	-4.406	-117.736	-134.011	269.330
57	0.000	-10.546	-9.778	-4.385	4.768	-1.818	5.296	-4.441	-116.768	-132.760	269.330
55	0.000	-8.511	-8.234	-4.118	5.640	-0.972	6.326	-4.159	-114.439	-130.967	269.330
53	0.000	-6.464	-6.284	-3.633	6.194	-0.206	7.210	-3.580	-111.204	-128.762	269.330
51	0.000	-4.679	-4.205	-2.919	6.362	0.522	7.946	-2.755	-107.276	-126.189	269.330
49	0.000	-3.361	-2.246	-2.024	6.172	1.257	8.576	-1.688	-102.707	-123.170	269.330
47	0.000	-2.593	-0.348	-1.010	5.660	1.994	9.111	-0.393	-97.445	-119.481	269.330
45	0.000	-2.462	1.140	-0.176	4.866	2.700	9.550	1.076	-91.225	-114.791	269.330
43	0.000	-2.895	1.839	0.476	3.919	3.342	9.867	2.630	-83.792	-108.911	269.330
41	0.000	-4.048	1.683	0.985	2.822	3.876	9.979	4.137	-75.492	-101.868	269.330
39	0.000	-6.420	0.437	1.172	1.449	4.200	9.709	5.444	-68.395	-94.718	269.330
37	0.000	-8.769	-1.072	0.945	0.135	4.122	8.807	6.293	-65.297	-91.618	269.330
35	0.000	-10.834	-2.404	0.657	-0.963	3.931	7.301	6.690	-63.342	-90.354	269.330
33	0.000	-12.593	-3.523	0.405	-1.841	3.874	5.478	6.622	-59.495	-88.019	269.330
31	0.000	-14.018	-4.434	0.215	-2.517	4.018	3.786	6.141	-49.886	-80.145	269.330
29	0.000	-15.043	-5.133	0.081	-2.998	4.414	2.342	5.176	-29.431	-8.339	269.330
27	0.000	-15.563	-5.622	-0.013	-3.297	5.109	1.159	3.783	-5.369	-13.294	269.330
25	0.000	-15.479	-5.896	-0.080	-3.425	6.095	0.264	2.183	-7.986	-16.394	269.330
23	0.000	-14.740	-5.957	-0.143	-3.390	7.354	-0.375	0.656	-9.596	-17.410	269.330
21	0.000	-13.328	-5.808	-0.236	-3.218	8.855	-0.783	-0.621	-10.013	-16.394	269.330
19	0.000	-11.321	-5.422	-0.395	-2.972	10.513	-1.020	-1.579	-9.434	-13.652	269.330
17	0.000	-8.779	-4.737	-0.616	-2.725	12.187	-1.210	-2.196	-8.151	-9.933	269.330
15	0.000	-5.927	-3.711	-0.790	-2.452	13.704	-1.370	-2.404	-6.426	-6.543	269.330
13	0.000	-3.361	-2.467	-0.742	-2.037	14.775	-1.324	-2.114	-4.543	-4.478	269.330
11	0.000	-1.652	-1.360	-0.473	-1.490	14.830	-1.015	-1.573	-2.795	-3.316	269.330
9	0.000	-0.716	-0.625	-0.186	-0.998	13.561	-0.655	-1.124	-1.414	-1.996	269.330
7	0.000	-0.251	-0.226	-0.003	-0.647	11.620	-0.413	-0.808	-0.528	-0.594	269.330
5	0.000	-0.053	-0.048	0.072	-0.400	8.822	-0.261	-0.559	-0.098	0.241	269.330
3	0.000	0.008	0.009	0.053	-0.215	4.933	-0.160	-0.298	0.024	0.320	269.330
1	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	135.451

TABLE B3.—Continued.

FLOW DEVIATION VELOCITY CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	131.894
77	0.000	-0.253	-0.330	-0.471	-0.358	-0.243	-0.138	-0.142	-15.451	-25.851	267.264
75	0.000	-0.666	-0.737	-0.930	-0.700	-0.488	-0.271	-0.272	-28.330	-50.589	267.264
73	0.000	-1.418	-1.313	-1.345	-0.957	-0.690	-0.377	-0.358	-35.598	-67.619	267.264
71	0.000	-2.848	-2.323	-1.826	-1.135	-0.873	-0.472	-0.391	-36.268	-73.765	267.264
69	0.000	-5.331	-4.116	-2.568	-1.287	-1.095	-0.595	-0.397	-32.826	-72.571	267.264
67	0.000	-8.960	-6.946	-3.759	-1.483	-1.347	-0.782	-0.411	-29.843	-70.528	267.264
65	0.000	-13.166	-10.515	-5.456	-1.796	-1.587	-1.047	-0.442	-31.263	-71.818	267.264
63	0.000	-16.991	-13.981	-7.495	-2.268	-1.830	-1.348	-0.438	-37.863	-75.486	267.264
61	0.000	-19.847	-16.715	-9.530	-2.827	-2.156	-1.655	-0.349	-46.189	-78.810	267.264
59	0.000	-21.599	-18.535	-11.269	-3.445	-2.562	-1.952	-0.195	-53.921	-81.338	267.264
57	0.000	-22.411	-19.448	-12.582	-4.106	-3.006	-2.235	-0.012	-60.245	-83.157	267.264
55	0.000	-22.570	-19.563	-13.419	-4.822	-3.482	-2.519	0.155	-64.258	-83.801	267.264
53	0.000	-22.373	-19.083	-13.734	-5.567	-4.059	-2.822	0.241	-65.100	-82.460	267.264
51	0.000	-22.075	-18.274	-13.484	-6.302	-4.831	-3.139	0.193	-62.247	-78.342	267.264
49	0.000	-21.815	-17.283	-12.710	-7.004	-5.585	-3.424	-0.018	-55.591	-71.194	267.264
47	0.000	-21.728	-16.020	-11.514	-7.647	-6.242	-3.689	-0.418	-45.635	-61.414	267.264
45	0.000	-21.563	-14.956	-10.143	-8.131	-6.768	-3.925	-0.982	-33.340	-49.765	267.264
43	0.000	-21.033	-14.232	-8.707	-8.310	-7.150	-4.116	-1.623	-2.619	-36.355	267.264
41	0.000	-20.316	-13.647	-7.280	-8.186	-7.398	-4.237	-2.223	-5.262	-4.147	267.264
39	0.000	-19.329	-12.854	-5.957	-7.848	-7.503	-4.224	-2.666	-7.966	-8.285	267.264
37	0.000	-18.220	-11.795	-4.850	-7.288	-7.369	-4.098	-2.909	-10.168	-12.176	267.264
35	0.000	-17.308	-10.883	-4.016	-6.736	-7.127	-3.898	-3.032	-11.672	-15.132	267.264
33	0.000	-16.319	-10.009	-3.344	-6.192	-6.814	-3.651	-3.120	-12.525	-16.833	267.264
31	0.000	-15.185	-9.153	-2.790	-5.659	-6.452	-3.378	-3.215	-12.835	-17.321	267.264
29	0.000	-13.886	-8.294	-2.326	-5.130	-6.049	-3.092	-3.319	-12.656	-16.845	267.264
27	0.000	-12.450	-7.431	-1.939	-4.606	-5.605	-2.803	-3.399	-12.006	-15.661	267.264
25	0.000	-10.903	-6.548	-1.635	-4.095	-5.128	-2.514	-3.460	-10.937	-13.906	267.264
23	0.000	-9.189	-5.612	-1.416	-3.621	-4.640	-2.236	-3.477	-9.474	-11.640	267.264
21	0.000	-7.278	-4.586	-1.267	-3.196	-4.175	-1.988	-3.418	-7.765	-8.843	267.264
19	0.000	-5.213	-3.452	-1.134	-2.783	-3.732	-1.773	-3.208	-6.091	-6.023	267.264
17	0.000	-3.169	-2.271	-0.942	-2.300	-3.233	-1.515	-2.740	-4.644	-3.607	267.264
15	0.000	-1.482	-1.214	-0.650	-1.695	-2.596	-1.111	-2.010	-3.634	-2.189	267.264
13	0.000	-0.464	-0.497	-0.332	-1.084	-1.875	-0.609	-1.239	-2.942	-2.042	267.264
11	0.000	-0.047	-0.140	-0.095	-0.632	-1.231	-0.220	-0.666	-2.202	-2.395	267.264
9	0.000	0.063	-0.001	0.035	-0.358	-0.816	-0.002	-0.321	-1.358	-2.203	267.264
7	0.000	0.070	0.046	0.084	-0.209	-0.580	0.088	-0.137	-0.658	-1.391	267.264
5	0.000	0.044	0.045	0.070	-0.136	-0.419	0.091	-0.053	-0.245	-0.584	267.264
3	0.000	0.019	0.023	0.036	-0.068	-0.220	0.048	-0.020	-0.061	-0.136	267.264
1	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	134.465

FLOW DEVIATION VELOCITY CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	130.971
77	0.000	0.074	0.134	0.247	0.201	0.098	0.135	0.156	-8.218	-15.557	265.156
75	0.000	-0.007	0.169	0.436	0.390	0.167	0.255	0.314	-15.708	-31.764	265.156
73	0.000	-0.420	-0.007	0.477	0.515	0.192	0.330	0.449	-20.975	-44.401	265.156
71	0.000	-1.402	-0.534	0.337	0.588	0.207	0.361	0.525	-22.603	-50.117	265.156
69	0.000	-3.336	-1.738	-0.089	0.614	0.248	0.358	0.515	-21.116	-50.488	265.156
67	0.000	-6.466	-3.975	-0.967	0.602	0.354	0.325	0.400	-19.033	-49.412	265.156
65	0.000	-10.549	-7.264	-2.405	0.526	0.573	0.275	0.173	-18.541	-48.202	265.156
63	0.000	-14.601	-10.845	-4.269	0.397	0.918	0.255	-0.136	-19.655	-45.002	265.156
61	0.000	-17.748	-13.762	-6.078	0.227	1.399	0.305	-0.499	-20.399	-38.942	265.156
59	0.000	-19.724	-15.611	-7.427	0.020	1.964	0.443	-0.957	-18.983	-31.445	265.156
57	0.000	-20.580	-16.403	-8.168	-0.175	2.544	0.660	-1.536	-14.650	-23.202	265.156
55	0.000	-20.526	-16.294	-8.306	-0.349	3.074	0.955	-2.204	-1.812	-13.954	265.156
53	0.000	-19.809	-15.481	-7.901	-0.475	3.522	1.294	-2.910	-3.101	-3.387	265.156
51	0.000	-18.683	-14.173	-6.965	-0.523	3.521	1.620	-3.572	-4.499	-0.481	265.156
49	0.000	-17.445	-12.542	-5.499	-0.546	3.283	1.910	-4.123	-5.834	-1.863	265.156
47	0.000	-16.526	-10.832	-3.603	-0.567	2.928	2.164	-4.409	-6.926	-3.163	265.156
45	0.000	-15.589	-9.364	-1.699	-0.567	2.586	2.396	-4.323	-7.773	-4.436	265.156
43	0.000	-14.453	-8.281	-0.137	-0.421	2.298	2.605	-3.927	-8.486	-5.833	265.156
41	0.000	-13.211	-7.324	1.115	-0.101	2.030	2.781	-3.344	-9.106	-7.381	265.156
39	0.000	-11.800	-5.990	2.218	0.324	1.766	2.930	-2.725	-9.561	-8.937	265.156
37	0.000	-10.730	-4.998	2.792	0.620	1.533	3.008	-2.199	-9.717	-10.087	265.156
35	0.000	-9.649	-4.138	3.102	0.813	1.317	3.042	-1.740	-9.585	-10.675	265.156
33	0.000	-8.571	-3.377	3.227	0.919	1.110	3.021	-1.409	-9.224	-10.684	265.156
31	0.000	-7.514	-2.717	3.217	0.956	0.904	2.951	-1.182	-8.678	-10.193	265.156
29	0.000	-6.483	-2.143	3.106	0.942	0.694	2.830	-1.023	-7.962	-9.311	265.156
27	0.000	-5.487	-1.649	2.910	0.881	0.473	2.652	-0.913	-7.051	-8.137	265.156
25	0.000	-4.492	-1.185	2.632	0.762	0.223	2.409	-0.849	-5.895	-6.744	265.156
23	0.000	-3.384	-0.670	2.279	0.582	-0.075	2.093	-0.842	-4.504	-5.073	265.156
21	0.000	-2.147	-0.088	1.880	0.368	-0.412	1.694	-0.865	-3.131	-3.190	265.156
19	0.000	-0.909	0.484	1.479	0.181	-0.724	1.257	-0.852	-2.093	-1.377	265.156
17	0.000	0.069	0.885	1.114	0.084	-0.903	0.876	-0.751	-1.600	0.020	265.156
15	0.000	0.580	0.990	0.808	0.075	-0.886	0.639	-0.542	-1.755	0.448	265.156
13	0.000	0.659	0.818	0.559	0.088	-0.734	0.517	-0.285	-2.205	-0.342	265.156
11	0.000	0.504	0.550	0.395	0.105	-0.569	0.451	-0.071	-2.390	-1.795	265.156
9	0.000	0.304	0.324	0.295	0.109	-0.462	0.402	0.066	-2.117	-2.820	265.156
7	0.000	0.151	0.180	0.229	0.100	-0.395	0.352	0.130	-1.580	-2.823	265.156
5	0.000	0.058	0.088	0.156	0.073	-0.303	0.271	0.129	-1.029	-2.050	265.156
3	0.000	0.014	0.033	0.088	0.040	-0.163	0.147	0.078	-0.490	-1.015	265.156
1	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133.413

TABLE B3.—Concluded.

FLOW CP	DEVIATION HUB	VELOCITY SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	130.359
77	0.000	-4.255	0.331	1.065	1.014	0.732	0.385	0.280	-2.371	-8.180	263.595
75	0.000	-6.197	1.140	2.148	2.029	1.469	0.748	0.556	-4.549	-16.909	263.594
73	0.000	-2.490	1.674	3.082	2.842	2.061	1.034	0.796	-5.859	-23.046	263.594
71	0.000	0.848	2.194	3.926	3.469	2.527	1.273	0.977	-5.058	-24.060	263.594
69	0.000	0.883	2.761	4.878	4.071	3.032	1.564	1.111	-1.867	-21.567	263.594
67	0.000	0.589	3.133	5.903	4.810	3.762	2.014	1.208	2.281	-18.842	263.594
65	0.000	-0.632	2.566	6.663	5.829	4.896	2.760	1.325	-0.090	-17.011	263.594
63	0.000	-2.797	0.791	6.757	7.215	6.674	4.164	1.769	-1.299	-13.654	263.594
61	0.000	-5.009	-1.250	6.301	8.751	9.007	6.094	1.773	-2.050	-5.986	263.594
59	0.000	-6.467	-2.552	5.852	10.083	11.444	7.714	1.129	-1.546	1.097	263.594
57	0.000	-6.844	-2.887	5.759	11.113	13.745	8.968	0.635	-0.530	3.390	263.594
55	0.000	-6.298	-2.405	6.030	11.852	15.745	9.929	0.356	0.275	4.927	263.594
53	-0.001	-5.162	-1.335	6.579	12.348	17.570	10.645	0.223	0.694	5.798	263.594
51	0.014	-3.799	0.066	7.448	12.629	18.699	11.133	0.284	0.775	6.164	263.594
49	-0.034	-2.576	1.531	8.671	12.699	18.794	11.364	0.454	0.597	6.136	263.594
47	0.146	-1.854	2.882	10.171	12.531	17.893	11.330	0.645	0.173	5.747	263.594
45	0.019	-1.891	3.873	11.644	12.130	16.456	11.111	0.852	-0.482	4.981	263.594
43	0.324	-2.020	4.189	12.489	11.446	14.864	10.754	1.098	-1.296	3.855	263.594
41	0.498	-1.816	4.324	12.709	10.672	13.254	10.258	1.377	-2.147	2.498	263.595
39	0.564	-1.514	4.520	12.659	9.927	11.692	9.650	1.665	-2.853	1.147	263.594
37	0.395	-1.026	4.842	12.355	9.193	10.344	9.009	1.929	-3.395	-0.167	263.594
35	-0.053	-0.515	5.095	11.878	8.498	9.149	8.352	2.158	-3.757	-1.345	263.594
33	-0.055	0.005	5.274	11.301	7.831	8.074	7.678	2.322	-3.916	-2.247	263.594
31	0.047	0.508	5.386	10.660	7.177	7.094	6.991	2.420	-3.860	-2.787	263.594
29	-0.001	0.933	5.410	9.956	6.523	6.189	6.282	2.399	-3.625	-2.951	263.594
27	-0.005	1.316	5.371	9.175	5.857	5.338	5.548	2.269	-3.244	-2.804	263.594
25	-0.001	1.744	5.317	8.317	5.166	4.515	4.790	2.042	-2.682	-2.470	263.594
23	0.000	2.293	5.296	7.376	4.419	3.694	4.017	1.715	-1.854	-1.927	263.594
21	0.000	2.942	5.301	6.360	3.660	2.877	3.228	1.279	-0.995	-0.986	263.594
19	0.000	3.478	5.171	5.279	2.950	2.126	2.470	0.788	-0.496	0.330	263.594
17	0.000	3.522	4.630	4.135	2.335	1.531	1.825	0.348	-0.591	1.591	263.594
15	0.000	2.958	3.627	3.001	1.808	1.142	1.355	0.083	-1.393	1.903	263.594
13	0.000	2.112	2.462	2.036	1.367	0.926	1.044	0.014	-2.614	0.558	263.594
11	0.000	1.306	1.475	1.349	1.041	0.800	0.849	0.058	-3.602	-2.036	263.594
9	0.000	0.700	0.797	0.910	0.816	0.699	0.722	0.129	-3.865	-4.409	263.594
7	0.000	0.320	0.404	0.644	0.644	0.592	0.623	0.171	-3.348	-5.194	263.594
5	0.000	0.114	0.193	0.441	0.470	0.454	0.489	0.162	-2.364	-4.269	263.594
3	0.000	0.029	0.074	0.224	0.250	0.247	0.273	0.100	-1.199	-2.331	263.594
1	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	132.635

FLOW CP	DEVIATION HUB	VELOCITY SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	-9.143	15.293	16.675	14.999	14.373	11.621	9.222	9.180	4.682	6.650	262.937
77	-10.403	15.048	16.447	14.778	14.164	11.436	9.054	9.051	4.620	6.467	262.895
75	-8.238	14.571	16.019	14.386	13.851	11.139	8.740	8.806	4.446	6.104	262.895
73	-10.348	13.469	15.049	13.680	13.393	10.629	8.162	8.357	3.997	5.314	262.895
71	-8.099	11.034	12.780	12.237	12.531	9.653	7.149	7.595	3.153	3.855	262.895
69	2.178	6.570	8.149	9.591	10.981	8.050	5.689	6.562	1.987	1.769	262.895
67	-2.388	0.839	1.829	6.482	9.220	6.529	4.475	5.619	1.239	0.248	262.895
65	-0.138	-3.073	-2.353	4.802	8.412	6.103	4.091	5.118	2.014	1.439	262.895
63	3.322	-4.940	-4.528	3.171	7.773	6.198	3.987	4.294	3.573	4.721	262.895
61	-5.990	-7.012	-6.806	0.606	6.835	6.574	4.058	3.143	4.349	7.267	262.895
59	-1.339	-9.202	-8.631	-1.553	5.839	7.230	4.319	2.242	4.571	8.583	262.895
57	-0.139	-10.548	-9.527	-2.829	5.075	8.209	4.777	1.575	4.670	9.270	262.895
55	-1.152	-10.669	-9.381	-3.205	4.650	9.380	5.372	1.043	4.576	9.599	262.895
53	-4.560	-9.864	-8.372	-2.819	4.568	10.718	6.056	0.633	4.277	9.647	262.895
51	-10.154	-8.435	-6.730	-1.737	4.841	11.939	6.783	0.388	3.785	9.431	262.895
49	-14.030	-6.661	-4.702	0.012	5.435	12.938	7.555	0.380	3.175	9.018	262.895
47	7.441	-4.956	-2.574	2.401	6.261	13.476	8.255	0.490	2.493	8.453	262.895
45	-12.896	-3.814	-0.525	5.259	7.341	13.605	8.888	0.691	1.728	7.712	262.895
43	-2.844	-3.030	1.172	8.111	8.505	13.565	9.474	1.000	0.808	6.752	262.895
41	-14.262	-1.856	2.890	10.565	9.700	13.569	10.022	1.441	0.068	5.637	262.895
39	-14.201	-0.119	5.026	12.823	11.010	13.731	10.534	2.021	-0.549	4.595	262.895
37	-13.649	1.694	7.145	14.644	12.126	13.940	10.934	2.681	-0.900	3.605	262.895
35	-11.578	3.463	9.051	16.036	13.067	14.141	11.244	3.409	-1.217	2.703	262.895
33	-8.827	5.251	10.834	17.149	13.887	14.334	11.486	4.168	-1.219	1.999	262.895
31	-7.416	7.043	12.496	18.074	14.634	14.533	11.677	4.936	-0.955	1.591	262.895
29	-12.186	8.833	14.039	18.870	15.335	14.751	11.836	5.722	-0.414	1.533	262.895
27	-13.881	10.671	15.486	19.570	16.016	14.996	11.966	6.482	0.374	1.825	262.895
25	4.846	12.629	16.944	20.227	16.721	15.295	12.090	7.221	1.422	2.345	262.895
23	5.545	14.756	18.521	20.926	17.526	15.711	12.288	7.938	2.872	3.067	262.895
21	-0.733	17.134	20.304	21.732	18.511	16.353	12.664	8.615	4.588	4.422	262.895
19	-0.584	19.462	22.007	22.492	19.634	17.299	13.338	9.323	6.206	6.775	262.895
17	0.829	20.993	22.978	22.627	20.207	18.007	14.283	10.380	7.760	10.138	262.895
15	1.626	21.057	22.604	21.591	19.633	17.245	13.952	11.044	8.252	12.602	262.895
13	1.690	20.301	21.493	20.093	18.578	15.883	12.860	10.755	6.990	11.717	262.895
11	3.114	18.941	20.108	18.507	17.371	14.584	11.840	10.485	6.256	10.275	262.895
9	-4.210	17.559	18.802	17.135	16.245	13.400	10.855	10.053	5.709	8.960	262.895
7	-7.539	16.556	17.859	16.170	15.412	12.542	10.114	9.700	5.259	7.951	262.895
5	-16.417	15.927	17.262	15.573	14.883	12.017	9.749	9.789	5.382	7.882	262.893
3	-11.623	14.850	16.913	15.226	14.565	11.709	9.461	9.370	4.769	6.871	262.895
1	-10.391	15.305	16.695	15.015	14.376	11.540	9.129	9.044	4.662	6.626	263.686

TABLE B4.—FLOW/GRID DEVIATION ANGLES

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	3.205	-0.398	0.046	0.692	1.333	-0.177	-6.851	-7.571	-1.762	0.000
75	0.000	-0.215	-0.425	0.224	1.271	1.911	-0.374	-8.377	-5.446	-0.290	0.000
73	0.000	-2.678	0.333	0.471	3.209	3.384	-3.957	-12.584	-2.935	1.123	0.000
71	0.000	-6.526	6.593	0.608	-6.389	-2.485	9.375	-33.833	-0.089	2.398	0.000
69	0.000	-9.118	-11.642	2.103	-0.306	0.963	5.469	25.502	3.314	3.748	0.000
67	0.000	-7.478	-5.104	2.827	2.191	3.258	5.604	10.507	7.164	5.293	0.000
65	0.000	-3.575	-1.976	4.327	3.958	4.421	5.603	9.437	10.349	6.655	0.000
63	0.000	0.379	0.433	4.943	4.636	4.351	5.605	10.194	11.145	6.572	0.000
61	0.000	3.465	2.276	4.830	4.676	3.938	5.437	10.821	9.169	4.950	0.000
59	0.000	5.645	3.830	4.526	4.541	3.658	5.284	11.236	5.960	3.070	0.000
57	0.000	7.158	5.164	4.283	4.433	3.592	5.249	11.502	2.920	1.690	0.000
55	0.000	8.307	6.279	4.175	4.393	3.665	5.312	11.743	0.363	0.852	0.000
53	0.000	9.232	7.272	4.247	4.424	3.813	5.443	11.989	-1.503	0.549	0.000
51	0.000	9.994	8.157	4.477	4.532	4.017	5.627	12.172	-2.880	0.686	0.000
49	0.000	10.698	8.974	4.833	4.702	4.267	5.851	12.343	-4.926	0.871	0.000
47	0.000	11.413	9.764	5.308	4.935	4.562	6.110	12.439	-10.244	0.924	0.000
45	0.000	12.201	10.582	5.896	5.237	4.917	6.405	12.494	-59.230	-0.081	0.000
43	0.000	13.120	11.484	6.601	5.613	5.343	6.747	12.520	-150.118	-3.828	0.000
41	0.000	14.219	12.534	7.496	6.110	5.834	7.143	12.557	21.260	-14.442	0.000
39	0.000	15.822	13.994	8.773	6.870	6.462	7.621	12.701	23.276	-49.325	0.000
37	0.000	17.733	15.712	10.232	7.796	7.171	8.206	13.173	-148.008	-67.493	0.000
35	0.000	19.787	17.577	11.830	8.912	8.016	8.914	13.993	-139.603	-73.264	0.000
33	0.000	21.925	19.509	13.495	10.145	9.000	9.733	15.032	-135.246	-79.535	0.000
31	0.000	24.155	21.503	15.199	11.438	10.052	10.599	16.055	-136.470	-92.026	0.000
29	0.000	26.548	23.578	16.914	12.722	11.064	11.411	16.803	-141.867	-111.807	0.000
27	0.000	29.232	25.812	18.668	14.006	12.035	12.119	17.211	-146.329	-124.994	0.000
25	0.000	32.372	28.334	20.478	15.322	13.044	12.837	17.595	-147.648	-126.719	0.000
23	0.000	36.263	31.196	22.300	16.618	14.043	13.617	18.001	-147.551	-123.537	0.000
21	0.000	41.399	34.458	24.045	17.795	14.938	14.355	18.317	-146.595	-115.956	0.000
19	0.000	-131.954	38.005	25.461	18.597	15.508	14.860	18.434	-145.205	-104.538	0.000
17	0.000	-124.429	41.104	25.866	18.393	15.202	14.705	17.976	-143.958	-92.887	0.000
15	0.000	-118.805	41.553	23.608	15.909	12.915	12.800	15.859	-144.564	-85.426	0.000
13	0.000	-123.881	34.477	16.770	10.310	7.952	7.958	10.166	28.095	-85.163	0.000
11	0.000	26.991	18.808	8.283	4.585	3.356	3.038	3.054	8.780	26.045	0.000
9	0.000	4.437	6.566	3.124	1.477	1.077	0.790	-0.245	-2.906	-14.601	0.000
7	0.000	-2.158	0.976	0.849	0.262	0.266	0.011	-1.293	-5.826	-14.362	0.000
5	0.000	-3.122	-0.947	0.063	-0.040	0.145	-0.128	-1.482	-6.313	-12.491	0.000
3	0.000	-2.733	-1.471	-0.150	-0.063	0.180	-0.123	-1.545	-6.332	-11.520	0.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	-0.507	0.325	0.155	0.968	2.382	-0.384	-7.499	-3.542	-0.244	0.000
75	0.000	-1.296	-3.736	0.350	1.716	3.587	-0.342	-8.753	-2.252	0.342	0.000
73	0.000	-2.628	-3.029	0.781	5.789	9.700	-0.283	-12.133	-0.632	1.083	0.000
71	0.000	-4.721	-4.585	2.030	-6.705	-9.979	-0.241	-25.031	1.328	1.969	0.000
69	0.000	-7.201	-6.298	-12.960	-2.331	-3.111	-0.006	-138.957	3.686	2.952	0.000
67	0.000	-8.171	-6.653	-1.127	-0.462	-0.546	1.230	10.871	6.294	3.904	0.000
65	0.000	-6.437	-5.122	0.637	1.386	1.746	2.923	7.126	8.190	4.273	0.000
63	0.000	-3.135	-2.712	1.859	2.739	2.921	4.023	7.322	8.547	3.584	0.000
61	0.000	0.150	-0.424	2.553	3.461	3.242	4.508	8.171	7.490	2.478	0.000
59	0.000	2.761	1.553	2.916	3.789	3.301	4.741	8.867	6.203	1.725	0.000
57	0.000	4.738	3.262	3.120	3.927	3.362	4.914	9.399	5.245	1.482	0.000
55	0.000	6.317	4.718	3.285	3.998	3.483	5.090	9.878	4.845	1.706	0.000
53	0.000	7.574	5.962	3.511	4.078	3.666	5.285	10.309	5.107	2.310	0.000
51	0.000	8.599	7.061	3.820	4.213	3.898	5.511	10.615	5.992	3.148	0.000
49	0.000	9.507	8.053	4.242	4.404	4.171	5.767	10.850	7.339	3.964	0.000
47	0.000	10.382	8.986	4.780	4.655	4.481	6.060	10.985	9.117	4.517	0.000
45	0.000	11.308	9.929	5.437	4.974	4.839	6.378	11.082	10.003	4.038	0.000
43	0.000	12.341	10.937	6.213	5.366	5.253	6.736	11.161	7.205	1.857	0.000
41	0.000	13.548	12.076	7.168	5.873	5.721	7.151	11.308	-32.057	-3.447	0.000
39	0.000	15.252	13.602	8.477	6.626	6.305	7.641	11.656	-121.652	-16.647	0.000
37	0.000	17.144	15.298	9.895	7.513	6.955	8.227	12.369	-117.636	-31.354	0.000
35	0.000	19.008	16.993	11.339	8.516	7.711	8.915	13.359	-115.389	-41.857	0.000
33	0.000	20.837	18.647	12.753	9.555	8.551	9.673	14.458	-116.873	-49.509	0.000
31	0.000	22.660	20.274	14.116	10.560	9.380	10.419	15.427	-123.788	-59.289	0.000
29	0.000	24.526	21.898	15.398	11.468	10.098	11.047	16.023	-134.506	-77.783	0.000
27	0.000	26.506	23.555	16.582	12.273	10.722	11.521	16.235	-142.878	-97.965	0.000
25	0.000	28.539	25.241	17.554	12.894	11.244	11.930	16.374	-146.678	-106.086	0.000
23	0.000	30.660	26.876	18.083	13.130	11.479	12.180	16.326	-148.310	-102.834	0.000
21	0.000	32.614	28.159	17.766	12.662	11.129	11.986	15.775	-149.199	-92.571	0.000
19	0.000	32.364	27.990	15.942	10.990	9.698	10.803	14.157	-150.725	-79.404	0.000
17	0.000	24.434	24.012	12.087	7.818	6.778	7.958	10.399	24.072	-77.398	0.000
15	0.000	9.041	15.426	7.233	4.193	3.375	4.051	4.782	11.385	18.521	0.000
13	0.000	-0.247	7.028	3.576	1.783	1.254	1.563	0.972	0.112	-12.384	0.000
11	0.000	-2.909	2.081	1.458	0.540	0.212	0.412	-0.673	-4.057	-12.617	0.000
9	0.000	-2.972	-0.139	0.367	-0.002	-0.237	-0.096	-1.344	-4.904	-9.919	0.000
7	0.000	-2.125	-0.784	-0.059	-0.114	-0.291	-0.191	-1.500	-4.652	-6.980	0.000
5	0.000	-1.284	-0.849	-0.181	-0.072	-0.203	-0.127	-1.524	-4.235	-4.642	0.000
3	0.000	-0.682	-0.767	-0.215	-0.037	-0.154	-0.085	-1.591	-3.885	-3.025	0.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE B4.—Continued.

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	-0.939	-1.241	-3.423	-4.039	-6.206	-1.822	9.092	1.728	0.206	0.000
75	0.000	-1.185	-1.283	-3.011	-3.106	-5.825	-1.360	10.921	1.790	0.252	0.000
73	0.000	-1.717	-1.510	-2.677	-2.191	-5.406	-0.914	16.297	1.700	0.204	0.000
71	0.000	-2.625	-2.003	-2.442	-1.471	-5.031	-0.606	-134.445	1.303	-0.103	0.000
69	0.000	-3.908	-2.814	-2.327	-0.916	-4.678	-0.376	-30.513	0.494	-0.907	0.000
67	0.000	-5.371	-3.908	-2.335	-0.458	-4.303	-0.131	-14.852	-0.583	-2.469	0.000
65	0.000	-6.473	-4.910	-2.422	-0.029	-3.808	0.236	-11.604	-1.599	-4.724	0.000
63	0.000	-6.779	-5.354	-2.445	0.505	-3.054	0.822	-10.151	-2.436	-7.084	0.000
61	0.000	-6.314	-5.195	-2.366	1.027	-2.193	1.497	-8.649	-3.170	-9.114	0.000
59	0.000	-5.363	-4.609	-2.141	1.452	-1.403	2.128	-7.115	-3.907	-10.734	0.000
57	0.000	-4.220	-3.762	-1.864	1.778	-0.742	2.676	-5.694	-4.780	-12.133	0.000
55	0.000	-3.102	-2.777	-1.554	2.001	-0.187	3.149	-4.363	-5.937	-13.534	0.000
53	0.000	-2.140	-1.762	-1.220	2.109	0.278	3.552	-3.067	-7.495	-15.068	0.000
51	0.000	-1.422	-0.812	-0.862	2.098	0.637	3.889	-1.780	-9.518	-16.784	0.000
49	0.000	-0.911	0.127	-0.483	1.994	0.976	4.183	-0.472	-12.010	-18.669	0.000
47	0.000	-0.750	0.885	-0.182	1.798	1.315	4.442	0.907	-14.853	-20.645	0.000
45	0.000	-0.947	1.325	0.089	1.565	1.648	4.665	2.379	-17.872	-22.576	0.000
43	0.000	-1.513	1.394	0.308	1.274	1.950	4.841	3.869	-20.796	-24.238	0.000
41	0.000	-2.553	1.129	0.462	0.897	2.201	4.941	5.233	-23.186	-25.364	0.000
39	0.000	-4.328	0.356	0.447	0.387	2.370	4.874	6.326	-24.040	-25.382	0.000
37	0.000	-6.031	-0.536	0.263	-0.152	2.319	4.495	6.724	-21.509	-22.118	0.000
35	0.000	-7.553	-1.340	0.087	-0.620	2.185	3.800	6.460	-16.014	-14.963	0.000
33	0.000	-8.853	-2.033	-0.041	-0.997	2.083	2.912	5.613	-6.877	-2.576	0.000
31	0.000	-9.829	-2.595	-0.124	-1.282	2.057	2.043	4.426	22.784	20.477	0.000
29	0.000	-10.387	-3.009	-0.169	-1.479	2.135	1.290	3.075	-43.453	-112.684	0.000
27	0.000	-10.456	-3.266	-0.185	-1.592	2.338	0.658	1.708	-25.156	-67.303	0.000
25	0.000	-10.016	-3.369	-0.179	-1.623	2.662	0.177	0.552	-18.377	-44.271	0.000
23	0.000	-9.138	-3.328	-0.166	-1.577	3.099	-0.162	-0.285	-14.129	-31.046	0.000
21	0.000	-7.906	-3.159	-0.172	-1.471	3.630	-0.371	-0.835	-10.858	-21.831	0.000
19	0.000	-6.436	-2.866	-0.216	-1.334	4.214	-0.487	-1.161	-8.256	-14.679	0.000
17	0.000	-4.826	-2.442	-0.298	-1.199	4.776	-0.569	-1.320	-6.283	-9.471	0.000
15	0.000	-3.204	-1.886	-0.363	-1.059	5.257	-0.624	-1.310	-4.740	-6.121	0.000
13	0.000	-1.831	-1.265	-0.334	-0.882	5.660	-0.591	-1.118	-3.457	-4.402	0.000
11	0.000	-0.929	-0.720	-0.210	-0.677	6.009	-0.468	-0.863	-2.336	-3.484	0.000
9	0.000	-0.415	-0.344	-0.070	-0.508	6.275	-0.342	-0.668	-1.373	-2.287	0.000
7	0.000	-0.140	-0.122	0.037	-0.395	6.443	-0.256	-0.542	-0.667	-0.866	0.000
5	0.000	-0.004	-0.006	0.108	-0.332	6.520	-0.208	-0.473	-0.253	0.198	0.000
3	0.000	0.068	0.061	0.137	-0.316	6.525	-0.224	-0.456	-0.056	0.730	0.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	-0.684	-0.780	-1.111	-1.481	-1.013	-0.979	-12.681	0.466	-0.196	0.000
75	0.000	-0.868	-0.868	-1.121	-1.437	-1.006	-0.926	-7.133	0.247	-0.354	0.000
73	0.000	-1.278	-1.084	-1.194	-1.427	-1.025	-0.878	-4.369	-0.455	-0.726	0.000
71	0.000	-2.024	-1.499	-1.355	-1.437	-1.077	-0.858	-2.904	-2.264	-1.610	0.000
69	0.000	-3.210	-2.247	-1.659	-1.482	-1.178	-0.884	-2.096	-6.329	-3.614	0.000
67	0.000	-4.810	-3.404	-2.166	-1.589	-1.299	-0.964	-1.695	-13.626	-7.668	0.000
65	0.000	-6.512	-4.785	-2.871	-1.775	-1.400	-1.092	-1.517	-21.960	-13.596	0.000
63	0.000	-7.884	-6.004	-3.627	-2.006	-1.499	-1.218	-1.313	-26.815	-18.939	0.000
61	0.000	-8.763	-6.830	-4.237	-2.227	-1.611	-1.296	-0.975	-27.960	-22.545	0.000
59	0.000	-9.245	-7.269	-4.638	-2.431	-1.727	-1.339	-0.608	-27.727	-24.961	0.000
57	0.000	-9.504	-7.412	-4.849	-2.623	-1.828	-1.374	-0.310	-26.865	-26.350	0.000
55	0.000	-9.697	-7.362	-4.897	-2.811	-1.923	-1.415	-0.144	-25.582	-26.892	0.000
53	0.000	-9.948	-7.225	-4.805	-2.983	-2.019	-1.471	-0.182	-23.871	-26.771	0.000
51	0.000	-10.320	-7.056	-4.575	-3.133	-2.283	-1.558	-0.470	-21.581	-26.077	0.000
49	0.000	-10.835	-6.833	-4.246	-3.278	-2.595	-1.662	-1.026	-18.263	-24.745	0.000
47	0.000	-11.213	-6.610	-3.903	-3.451	-2.896	-1.773	-1.778	-11.970	-22.236	0.000
45	0.000	-11.309	-6.549	-3.594	-3.603	-3.142	-1.878	-2.578	6.126	-16.629	0.000
43	0.000	-11.290	-6.577	-3.282	-3.660	-3.312	-1.975	-3.288	-92.006	2.837	0.000
41	0.000	-11.118	-6.504	-2.895	-3.588	-3.409	-2.050	-3.796	-46.683	-76.343	0.000
39	0.000	-10.799	-6.315	-2.532	-3.456	-3.450	-2.064	-3.992	-34.984	-43.665	0.000
37	0.000	-10.204	-5.833	-2.126	-3.219	-3.384	-2.023	-3.894	-28.253	-34.741	0.000
35	0.000	-9.664	-5.420	-1.811	-2.994	-3.275	-1.941	-3.646	-23.439	-29.755	0.000
33	0.000	-9.004	-4.993	-1.538	-2.764	-3.134	-1.835	-3.363	-19.699	-25.881	0.000
31	0.000	-8.255	-4.563	-1.302	-2.531	-2.968	-1.714	-3.091	-16.616	-22.308	0.000
29	0.000	-7.439	-4.127	-1.097	-2.297	-2.782	-1.585	-2.829	-13.856	-18.923	0.000
27	0.000	-6.577	-3.685	-0.925	-2.065	-2.577	-1.450	-2.604	-11.465	-15.787	0.000
25	0.000	-5.701	-3.234	-0.787	-1.840	-2.358	-1.311	-2.409	-9.325	-12.891	0.000
23	0.000	-4.769	-2.758	-0.685	-1.629	-2.133	-1.173	-2.228	-7.366	-10.145	0.000
21	0.000	-3.770	-2.247	-0.614	-1.437	-1.914	-1.041	-2.051	-5.681	-7.417	0.000
19	0.000	-2.728	-1.701	-0.550	-1.252	-1.701	-0.916	-1.847	-4.370	-5.065	0.000
17	0.000	-1.711	-1.144	-0.463	-1.049	-1.476	-0.773	-1.560	-3.417	-3.209	0.000
15	0.000	-0.848	-0.642	-0.333	-0.808	-1.222	-0.578	-1.180	-2.841	-2.118	0.000
13	0.000	-0.283	-0.279	-0.178	-0.560	-0.957	-0.346	-0.783	-2.476	-1.986	0.000
11	0.000	-0.020	-0.079	-0.051	-0.372	-0.726	-0.152	-0.468	-2.002	-2.246	0.000
9	0.000	0.068	0.014	0.036	-0.250	-0.576	-0.019	-0.258	-1.354	-2.049	0.000
7	0.000	0.089	0.060	0.086	-0.179	-0.492	0.060	-0.132	-0.754	-1.397	0.000
5	0.000	0.080	0.075	0.097	-0.155	-0.462	0.086	-0.071	-0.370	-0.743	0.000
3	0.000	0.072	0.076	0.097	-0.145	-0.449	0.084	-0.053	-0.181	-0.318	0.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE B4.—Continued.

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	0.175	0.278	0.452	0.516	0.556	0.899	4.132	-2.499	-0.170	0.000
75	0.000	-0.003	0.199	0.417	0.491	0.475	0.819	3.637	-3.430	-0.790	0.000
73	0.000	-0.340	0.044	0.350	0.454	0.378	0.722	3.142	-5.393	-1.708	0.000
71	0.000	-0.915	-0.229	0.247	0.407	0.287	0.609	2.644	-9.349	-2.817	0.000
69	0.000	-1.833	-0.732	0.070	0.337	0.198	0.471	2.080	-17.206	-4.005	0.000
67	0.000	-3.131	-1.569	-0.233	0.234	0.108	0.305	1.389	-30.275	-5.683	0.000
65	0.000	-4.687	-2.713	-0.718	0.100	0.036	0.134	0.573	-41.408	-9.137	0.000
63	0.000	-6.161	-3.909	-1.319	-0.051	0.023	-0.001	-0.278	-41.225	-13.930	0.000
61	0.000	-7.224	-4.839	-1.838	-0.211	0.090	-0.051	-1.077	-35.837	-19.682	0.000
59	0.000	-7.860	-5.368	-2.146	-0.361	0.224	-0.019	-1.905	-32.833	-28.837	0.000
57	0.000	-8.160	-5.553	-2.232	-0.471	0.403	0.077	-2.808	-88.251	-44.476	0.000
55	0.000	-8.231	-5.496	-2.138	-0.544	0.597	0.214	-3.718	-14.744	-76.110	0.000
53	0.000	-8.173	-5.284	-1.904	-0.570	0.761	0.367	-4.538	-17.931	-132.663	0.000
51	0.000	-8.071	-4.958	-1.535	-0.542	0.767	0.535	-5.091	-18.754	14.201	0.000
49	0.000	-8.053	-4.551	-1.066	-0.485	0.728	0.692	-5.346	-18.597	1.486	0.000
47	0.000	-8.078	-4.113	-0.534	-0.435	0.652	0.826	-5.257	-17.684	-4.074	0.000
45	0.000	-7.855	-3.805	-0.065	-0.380	0.581	0.938	-4.833	-16.312	-6.901	0.000
43	0.000	-7.450	-3.532	0.329	-0.277	0.538	1.040	-4.164	-14.774	-8.564	0.000
41	0.000	-7.009	-3.225	0.664	-0.132	0.502	1.128	-3.379	-13.171	-9.420	0.000
39	0.000	-6.383	-2.756	0.979	0.032	0.445	1.207	-2.604	-11.597	-9.760	0.000
37	0.000	-5.810	-2.348	1.196	0.166	0.395	1.251	-1.944	-10.273	-9.788	0.000
35	0.000	-5.197	-1.951	1.324	0.260	0.343	1.275	-1.422	-9.046	-9.448	0.000
33	0.000	-4.570	-1.597	1.376	0.310	0.286	1.275	-1.056	-7.919	-8.810	0.000
31	0.000	-3.964	-1.297	1.369	0.331	0.222	1.253	-0.799	-6.872	-7.941	0.000
29	0.000	-3.387	-1.037	1.321	0.330	0.152	1.206	-0.614	-5.878	-6.931	0.000
27	0.000	-2.838	-0.807	1.238	0.308	0.072	1.133	-0.482	-4.897	-5.867	0.000
25	0.000	-2.316	-0.588	1.117	0.260	-0.023	1.026	-0.410	-3.901	-4.791	0.000
23	0.000	-1.748	-0.343	0.963	0.186	-0.143	0.883	-0.396	-2.894	-3.618	0.000
21	0.000	-1.127	-0.066	0.796	0.099	-0.279	0.701	-0.419	-2.014	-2.342	0.000
19	0.000	-0.505	0.215	0.638	0.029	-0.405	0.505	-0.448	-1.416	-1.091	0.000
17	0.000	0.013	0.436	0.505	-0.001	-0.482	0.347	-0.448	-1.182	-0.039	0.000
15	0.000	0.329	0.534	0.397	0.007	-0.489	0.263	-0.381	-1.378	0.375	0.000
13	0.000	0.426	0.492	0.307	0.027	-0.447	0.238	-0.244	-1.816	-0.219	0.000
11	0.000	0.376	0.379	0.249	0.052	-0.396	0.253	-0.093	-2.056	-1.366	0.000
9	0.000	0.270	0.266	0.220	0.070	-0.367	0.277	0.028	-1.957	-2.188	0.000
7	0.000	0.168	0.184	0.208	0.078	-0.361	0.290	0.106	-1.693	-2.448	0.000
5	0.000	0.089	0.123	0.191	0.077	-0.357	0.290	0.147	-1.465	-2.347	0.000
3	0.000	0.040	0.088	0.188	0.083	-0.352	0.288	0.170	-1.314	-2.162	0.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	-4.782	29.974	5.561	5.977	6.483	4.035	5.883	-70.973	2.624	0.000
75	0.000	-7.397	11.479	4.792	5.220	5.529	3.531	5.276	-106.836	-0.124	0.000
73	0.000	25.706	6.034	4.238	4.609	4.661	3.040	4.700	-133.337	-3.190	0.000
71	0.000	3.335	4.058	3.956	4.242	4.044	2.682	4.218	30.903	-7.130	0.000
69	0.000	1.523	3.080	3.877	4.115	3.696	2.487	3.865	22.450	-10.781	0.000
67	0.000	0.662	2.615	3.939	4.215	3.614	2.456	3.606	16.941	-9.031	0.000
65	0.000	-0.245	1.706	3.997	4.551	3.863	2.667	3.559	12.427	-1.105	0.000
63	0.000	-1.228	0.877	3.913	5.066	4.572	3.419	4.228	8.743	-17.589	0.000
61	0.000	-1.979	0.186	3.727	5.477	5.503	4.318	4.024	4.755	38.930	0.000
59	0.000	-2.311	-0.128	3.587	5.599	6.159	4.720	2.736	5.427	34.822	0.000
57	0.000	-2.210	-0.070	3.570	5.522	6.567	4.872	1.821	7.655	33.017	0.000
55	0.000	-1.817	0.242	3.659	5.354	6.819	4.932	1.274	8.628	30.257	0.000
53	0.000	-1.311	0.683	3.828	5.152	6.788	4.924	0.891	8.425	27.242	0.000
51	0.000	-0.841	1.155	4.081	4.965	6.540	4.871	0.626	7.495	24.110	0.000
49	0.000	-0.531	1.598	4.417	4.807	6.271	4.807	0.551	6.078	20.781	0.000
47	0.000	-0.523	2.001	4.780	4.671	5.953	4.723	0.601	4.428	17.247	0.000
45	0.000	-0.687	2.224	5.092	4.525	5.579	4.605	0.709	2.716	13.611	0.000
43	0.000	-0.784	2.234	5.221	4.324	5.159	4.449	0.856	1.125	10.001	0.000
41	0.000	-0.723	2.213	5.177	4.072	4.699	4.250	1.033	-0.159	6.612	0.000
39	0.000	-0.545	2.286	5.104	3.802	4.203	4.018	1.231	-0.964	3.977	0.000
37	0.000	-0.401	2.314	4.977	3.535	3.761	3.773	1.401	-1.477	2.101	0.000
35	0.000	-0.240	2.330	4.800	3.283	3.361	3.515	1.532	-1.769	0.744	0.000
33	0.000	-0.030	2.358	4.588	3.041	2.996	3.244	1.605	-1.884	-0.192	0.000
31	0.000	0.198	2.381	4.348	2.799	2.656	2.962	1.616	-1.844	-0.758	0.000
29	0.000	0.398	2.371	4.077	2.553	2.334	2.666	1.540	-1.704	-1.022	0.000
27	0.000	0.577	2.335	3.767	2.296	2.025	2.355	1.400	-1.498	-1.068	0.000
25	0.000	0.779	2.296	3.410	2.018	1.716	2.028	1.211	-1.217	-1.005	0.000
23	0.000	1.042	2.278	3.009	1.716	1.395	1.683	0.980	-0.818	-0.857	0.000
21	0.000	1.358	2.289	2.589	1.414	1.074	1.329	0.701	-0.425	-0.398	0.000
19	0.000	1.649	2.280	2.177	1.154	0.789	1.003	0.404	-0.215	0.363	0.000
17	0.000	1.756	2.139	1.774	0.957	0.583	0.750	0.136	-0.333	1.202	0.000
15	0.000	1.583	1.798	1.378	0.806	0.471	0.590	-0.039	-0.916	1.455	0.000
13	0.000	1.230	1.334	1.030	0.686	0.438	0.504	-0.094	-1.812	0.533	0.000
11	0.000	0.843	0.893	0.777	0.604	0.444	0.472	-0.063	-2.571	-1.218	0.000
9	0.000	0.512	0.555	0.619	0.551	0.451	0.468	0.000	-2.961	-2.826	0.000
7	0.000	0.274	0.338	0.530	0.514	0.446	0.473	0.058	-3.025	-3.747	0.000
5	0.000	0.123	0.214	0.472	0.491	0.443	0.476	0.095	-2.901	-4.051	0.000
3	0.000	0.049	0.150	0.448	0.488	0.446	0.479	0.121	-2.740	-4.028	0.000
1	0.000	0.000	-119.677	0.000	0.000	0.000	-128.722	-124.055	-125.259	-128.146	0.000

TABLE B4.—Continued.

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	9.951	9.862	8.627	8.358	7.401	6.381	6.058	2.547	3.581	0.000
77	0.000	9.927	9.869	8.687	8.446	7.510	6.518	6.181	2.732	3.706	0.000
75	0.000	9.887	9.907	8.937	8.781	7.891	6.889	6.518	3.003	3.899	0.000
73	0.000	9.813	10.034	9.543	9.557	8.626	7.463	7.060	3.191	3.900	0.000
71	0.000	9.586	10.160	10.316	10.716	9.566	8.057	7.905	3.274	3.474	0.000
69	0.000	7.862	8.859	10.139	11.654	10.122	8.165	9.500	3.281	2.031	0.000
67	0.000	1.077	2.200	6.830	10.639	9.054	7.019	11.353	5.274	0.310	0.000
65	0.000	-3.055	-1.761	3.611	7.934	6.933	5.347	10.411	12.513	12.270	0.000
63	0.000	-3.203	-2.357	1.927	5.812	5.579	4.135	7.252	15.746	27.139	0.000
61	0.000	-3.671	-3.009	0.623	4.245	4.900	3.403	4.751	16.187	29.605	0.000
59	0.000	-4.293	-3.453	-0.160	3.109	4.536	2.997	3.315	16.026	29.473	0.000
57	0.000	-4.522	-3.492	-0.472	2.390	4.420	2.826	2.420	15.358	28.553	0.000
55	0.000	-4.258	-3.150	-0.419	2.001	4.450	2.812	1.779	14.261	27.085	0.000
53	0.000	-3.723	-2.568	-0.110	1.849	4.407	2.889	1.281	12.965	25.417	0.000
51	0.000	-3.071	-1.863	0.400	1.888	4.284	3.024	0.897	11.515	23.594	0.000
49	0.000	-2.408	-1.116	1.081	2.082	4.292	3.209	0.659	9.852	21.523	0.000
47	0.000	-1.910	-0.390	1.896	2.393	4.386	3.432	0.617	7.986	19.113	0.000
45	0.000	-1.709	0.271	2.795	2.809	4.503	3.660	0.677	6.051	16.374	0.000
43	0.000	-1.412	0.838	3.619	3.245	4.620	3.890	0.862	4.217	13.406	0.000
41	0.000	-0.799	1.543	4.354	3.689	4.737	4.111	1.141	2.663	10.321	0.000
39	0.000	0.169	2.511	5.126	4.160	4.859	4.321	1.509	1.619	7.649	0.000
37	0.000	1.002	3.334	5.775	4.571	4.986	4.490	1.899	0.954	5.645	0.000
35	0.000	1.779	4.053	6.287	4.920	5.095	4.617	2.293	0.569	4.161	0.000
33	0.000	2.552	4.715	6.704	5.226	5.198	4.712	2.666	0.406	3.117	0.000
31	0.000	3.320	5.336	7.053	5.507	5.302	4.780	2.994	0.437	2.453	0.000
29	0.000	4.071	5.908	7.354	5.772	5.412	4.831	3.273	0.631	2.112	0.000
27	0.000	4.820	6.427	7.611	6.027	5.532	4.865	3.496	0.952	2.037	0.000
25	0.000	5.601	6.935	7.825	6.274	5.664	4.891	3.678	1.389	2.122	0.000
23	0.000	6.449	7.483	8.020	6.528	5.814	4.923	3.839	2.007	2.337	0.000
21	0.000	7.436	8.146	8.260	6.849	6.031	5.008	4.010	2.754	2.935	0.000
19	0.000	8.546	8.927	8.603	7.327	6.424	5.270	4.283	3.531	4.153	0.000
17	0.000	9.590	9.672	8.938	7.836	6.997	5.864	4.861	4.392	6.024	0.000
15	0.000	10.177	10.037	8.972	8.075	7.239	6.240	5.496	4.705	7.446	0.000
13	0.000	10.517	10.172	8.923	8.221	7.293	6.292	5.680	3.807	6.637	0.000
11	0.000	10.575	10.196	8.882	8.367	7.431	6.435	5.936	3.318	5.583	0.000
9	0.000	10.396	10.083	8.814	8.424	7.471	6.491	6.009	3.012	4.779	0.000
7	0.000	10.193	9.962	8.726	8.385	7.399	6.430	6.027	2.751	4.192	0.000
5	0.000	10.069	9.896	8.653	8.343	7.345	6.431	6.214	2.833	4.106	0.000
3	0.000	9.588	9.872	8.617	8.322	7.318	6.395	6.072	2.486	3.590	0.000
1	0.000	9.958	9.874	8.635	8.360	7.355	6.325	5.970	2.530	3.562	0.000

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	2.910	-0.507	0.008	0.637	1.615	-0.623	-7.568	-5.736	-0.686	0.000
75	0.000	0.098	-0.639	0.130	1.140	3.136	-3.293	-8.874	-3.864	0.114	0.000
73	0.000	-2.334	-0.120	0.259	2.523	-0.004	7.427	-12.468	-1.834	0.931	0.000
71	0.000	-6.488	3.516	0.096	-14.511	2.382	5.400	-29.805	0.441	1.844	0.000
69	0.000	-9.825	-24.730	-2.984	-0.315	4.082	6.466	-152.104	3.042	2.995	0.000
67	0.000	-8.383	-6.391	4.839	2.396	4.776	7.100	10.623	5.950	4.367	0.000
65	0.000	-4.309	-2.494	5.397	4.329	3.753	5.957	9.610	8.448	5.230	0.000
63	0.000	-0.210	0.173	6.007	5.108	2.761	4.802	10.337	8.964	4.565	0.000
61	0.000	3.048	2.147	6.018	5.254	2.367	4.500	10.915	7.339	2.952	0.000
59	0.000	5.380	3.783	5.806	5.201	2.321	4.484	11.234	5.518	1.868	0.000
57	0.000	7.018	5.213	5.609	5.130	2.441	4.598	11.455	4.789	1.900	0.000
55	0.000	8.291	6.446	5.488	5.110	2.625	4.785	11.674	5.449	2.997	0.000
53	0.000	9.321	7.543	5.520	5.146	2.839	5.006	11.830	7.656	4.959	0.000
51	0.000	10.158	8.513	5.665	5.240	3.075	5.254	11.866	11.260	7.409	0.000
49	0.000	10.924	9.411	5.969	5.390	3.341	5.513	11.790	15.742	9.765	0.000
47	0.000	11.692	10.269	6.411	5.600	3.644	5.804	11.568	21.005	11.568	0.000
45	0.000	12.522	11.144	6.991	5.875	3.988	6.123	11.281	25.460	11.764	0.000
43	0.000	13.454	12.092	7.734	6.242	4.384	6.474	11.012	26.666	9.442	0.000
41	0.000	14.608	13.210	8.683	6.729	4.853	6.873	10.860	20.059	4.008	0.000
39	0.000	16.292	14.760	10.022	7.457	5.435	7.352	11.020	-6.030	-5.504	0.000
37	0.000	18.284	16.572	11.573	8.363	6.091	7.914	11.673	-35.173	-16.399	0.000
35	0.000	20.424	18.528	13.265	9.446	6.862	8.582	12.847	-47.021	-23.896	0.000
33	0.000	22.650	20.552	15.033	10.661	7.760	9.347	14.357	-52.156	-27.613	0.000
31	0.000	24.973	22.640	16.843	11.945	8.714	10.160	15.868	-57.380	-29.382	0.000
29	0.000	27.480	24.817	18.673	13.224	9.615	10.914	16.907	-68.562	-31.954	0.000
27	0.000	30.313	27.172	20.554	14.506	10.459	11.535	17.367	-82.908	-36.085	0.000
25	0.000	33.658	29.862	22.510	15.821	11.318	12.144	17.826	-94.601	-40.884	0.000
23	0.000	37.863	32.893	24.504	17.117	12.139	12.768	18.289	-98.883	-42.026	0.000
21	0.000	43.488	36.402	26.461	18.297	12.815	13.300	18.616	-100.346	-41.290	0.000
19	0.000	-129.176	40.265	28.152	19.102	13.115	13.582	18.748	-101.668	-41.517	0.000
17	0.000	-120.775	43.786	28.904	18.896	12.510	13.145	18.285	-102.580	-43.048	0.000
15	0.000	-113.911	44.827	26.928	16.376	10.065	11.042	16.178	-102.715	-42.154	0.000
13	0.000	-117.003	38.184	19.696	10.643	5.655	6.388	10.455	-105.868	-32.520	0.000
11	0.000	31.780	21.306	9.908	4.749	2.284	2.338	2.871	28.538	-3.923	0.000
9	0.000	4.746	7.417	3.780	1.532	0.670	0.543	-0.816	-9.405	-120.872	0.000
7	0.000	-2.669	1.087	1.050	0.259	0.133	-0.081	-1.978	-13.094	-97.013	0.000
5	0.000	-3.645	-1.064	0.081	-0.063	0.102	-0.175	-2.200	-13.497	-131.386	0.000
3	0.000	-3.188	-1.647	-0.196	-0.095	0.151	-0.169	-2.258	-14.250	18.718	0.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE B4.—Continued.

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	-0.456	0.034	0.115	0.816	2.921	-0.700	-8.024	-2.843	-0.120	0.000
75	0.000	-1.291	-5.665	0.240	1.385	6.504	-1.003	-8.918	-1.702	0.406	0.000
73	0.000	-2.689	-3.290	0.478	3.690	-13.156	-11.844	-11.404	-0.276	1.079	0.000
71	0.000	-4.968	-5.344	0.860	-12.152	-3.466	1.018	-19.914	1.350	1.852	0.000
69	0.000	-7.832	-7.644	2.075	-2.574	-1.856	0.630	-114.343	3.187	2.646	0.000
67	0.000	-9.246	-8.128	-1.605	-0.444	0.063	1.535	11.812	5.136	3.249	0.000
65	0.000	-7.667	-6.330	1.086	1.618	1.561	2.738	7.110	6.572	3.176	0.000
63	0.000	-4.308	-3.650	2.368	3.121	2.104	3.531	7.258	6.750	2.288	0.000
61	0.000	-0.873	-1.180	3.155	3.939	2.174	3.932	8.023	6.200	1.448	0.000
59	0.000	1.988	0.937	3.650	4.355	2.238	4.187	8.659	6.035	1.433	0.000
57	0.000	4.171	2.791	3.981	4.575	2.389	4.420	9.164	6.719	2.324	0.000
55	0.000	5.913	[illegible]19	4.249	4.708	2.592	4.660	9.576	8.316	3.922	0.000
53	0.000	7.344	5.876	4.537	4.823	2.821	4.909	9.825	10.841	5.980	0.000
51	0.000	8.504	7.130	4.817	4.945	3.067	5.176	9.900	13.881	8.030	0.000
49	0.000	9.535	8.266	5.215	5.112	3.335	5.457	9.804	16.995	9.596	0.000
47	0.000	10.519	9.323	5.738	5.335	3.636	5.764	9.572	19.519	10.157	0.000
45	0.000	11.516	10.361	6.400	5.623	3.971	6.100	9.335	20.149	8.998	0.000
43	0.000	12.593	11.440	7.225	5.999	4.348	6.464	9.206	17.503	5.760	0.000
41	0.000	13.893	12.682	8.255	6.490	4.784	6.869	9.289	9.680	0.258	0.000
39	0.000	15.677	14.312	9.638	7.201	5.317	7.352	9.787	-5.130	-7.721	0.000
37	0.000	17.666	16.116	11.155	8.060	5.907	7.913	10.791	-20.923	-15.852	0.000
35	0.000	19.620	17.907	12.694	9.028	6.589	8.557	12.196	-31.348	-21.303	0.000
33	0.000	21.536	19.649	14.206	10.045	7.343	9.263	13.776	-37.187	-23.574	0.000
31	0.000	23.453	21.367	15.665	11.038	8.079	9.964	15.199	-41.232	-23.625	0.000
29	0.000	25.434	23.089	17.048	11.935	8.696	10.543	16.058	-47.831	-23.436	0.000
27	0.000	27.567	24.859	18.338	12.730	9.209	10.944	16.364	-59.016	-25.076	0.000
25	0.000	29.806	26.689	19.418	13.339	9.610	11.262	16.644	-74.197	-28.823	0.000
23	0.000	32.236	28.506	20.051	13.559	9.720	11.396	16.713	-83.288	-29.759	0.000
21	0.000	34.654	30.014	19.809	13.064	9.264	11.050	16.212	-88.888	-28.661	0.000
19	0.000	34.839	30.028	17.962	11.343	7.832	9.764	14.602	-93.969	-26.862	0.000
17	0.000	26.371	25.917	13.756	8.079	5.216	6.966	10.797	-103.901	-22.848	0.000
15	0.000	9.091	16.595	8.285	4.332	2.453	3.687	4.956	-142.565	-5.636	0.000
13	0.000	-0.877	7.405	4.097	1.835	0.821	1.320	0.780	-1.954	-63.814	0.000
11	0.000	-3.457	2.084	1.669	0.541	0.012	0.302	-1.107	-8.667	-30.296	0.000
9	0.000	-3.345	-0.251	0.420	-0.028	-0.331	-0.156	-1.869	-8.640	-20.451	0.000
7	0.000	-2.348	-0.992	-0.077	-0.148	-0.340	-0.239	-2.065	-7.619	-13.872	0.000
5	0.000	-1.410	-0.948	-0.229	-0.106	-0.236	-0.171	-2.102	-6.777	-8.580	0.000
3	0.000	-0.754	-0.850	-0.275	-0.074	-0.186	-0.135	-2.153	-6.217	-4.436	0.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	-1.087	-1.461	-6.128	-6.061	-4.718	-0.565	15.898	1.723	0.244	0.000
75	0.000	-1.396	-1.517	-5.073	-4.262	-4.599	-0.455	22.103	1.787	0.300	0.000
73	0.000	-2.028	-1.799	-4.262	-2.768	-4.461	-0.342	-135.001	1.721	0.293	0.000
71	0.000	-3.073	-2.409	-3.738	-1.701	-4.294	-0.241	-52.000	1.445	0.103	0.000
69	0.000	-4.566	-3.415	-3.491	-0.882	-4.083	-0.131	-22.478	0.990	-0.429	0.000
67	0.000	-6.319	-4.789	-3.473	-0.216	-3.800	0.028	-16.459	0.554	-1.515	0.000
65	0.000	-7.759	-6.144	-3.576	0.363	-3.303	0.367	-14.832	0.245	-3.260	0.000
63	0.000	-8.386	-6.900	-3.623	1.014	-2.607	0.906	-13.650	-0.145	-5.367	0.000
61	0.000	-8.146	-6.931	-3.475	1.637	-1.902	1.501	-11.886	-0.793	-7.380	0.000
59	0.000	-7.295	-6.419	-3.159	2.138	-1.306	2.039	-10.011	-1.759	-9.148	0.000
57	0.000	-6.135	-5.567	-2.761	2.503	-0.828	2.499	-8.328	-3.100	-10.829	0.000
55	0.000	-4.894	-4.519	-2.348	2.740	-0.437	2.890	-6.792	-4.865	-12.569	0.000
53	0.000	-3.733	-3.378	-1.920	2.845	-0.093	3.232	-5.266	-7.064	-14.422	0.000
51	0.000	-2.758	-2.248	-1.461	2.819	0.234	3.525	-3.750	-9.657	-16.382	0.000
49	0.000	-2.053	-1.207	-0.978	2.686	0.563	3.789	-2.180	-12.524	-18.392	0.000
47	0.000	-1.655	-0.189	-0.480	2.455	0.891	4.026	-0.490	-15.491	-20.347	0.000
45	0.000	-1.639	0.628	-0.084	2.135	1.205	4.235	1.310	-18.386	-22.129	0.000
43	0.000	-2.000	1.043	0.233	1.749	1.491	4.406	3.148	-21.054	-23.617	0.000
41	0.000	-2.923	0.996	0.496	1.284	1.731	4.505	4.892	-23.279	-24.691	0.000
39	0.000	-4.846	0.271	0.608	0.673	1.877	4.450	6.372	-24.304	-24.958	0.000
37	0.000	-6.763	-0.681	0.495	0.063	1.836	4.096	7.214	-22.838	-22.814	0.000
35	0.000	-8.440	-1.554	0.347	-0.455	1.741	3.435	7.444	-19.218	-17.619	0.000
33	0.000	-9.811	-2.300	0.214	-0.871	1.699	2.596	7.092	-13.504	-8.417	0.000
31	0.000	-10.796	-2.903	0.114	-1.189	1.739	1.797	6.252	-4.615	6.501	0.000
29	0.000	-11.305	-3.344	0.043	-1.411	1.882	1.108	4.933	17.013	-149.163	0.000
27	0.000	-11.271	-3.614	-0.007	-1.543	2.143	0.545	3.331	-70.564	-111.705	0.000
25	0.000	-10.698	-3.715	-0.042	-1.592	2.514	0.123	1.764	-31.378	-72.448	0.000
23	0.000	-9.680	-3.660	-0.074	-1.567	2.985	-0.174	0.489	-20.551	-45.975	0.000
21	0.000	-8.320	-3.463	-0.122	-1.478	3.541	-0.360	-0.430	-14.735	-29.734	0.000
19	0.000	-6.756	-3.131	-0.201	-1.356	4.144	-0.467	-1.029	-10.836	-18.923	0.000
17	0.000	-5.067	-2.659	-0.310	-1.230	4.724	-0.548	-1.363	-8.065	-11.629	0.000
15	0.000	-3.378	-2.051	-0.392	-1.095	5.217	-0.613	-1.439	-5.988	-7.216	0.000
13	0.000	-1.957	-1.383	-0.371	-0.919	5.628	-0.594	-1.268	-4.305	-5.062	0.000
11	0.000	-1.025	-0.807	-0.249	-0.713	5.981	-0.483	-0.999	-2.859	-3.965	0.000
9	0.000	-0.491	-0.408	-0.110	-0.541	6.249	-0.353	-0.785	-1.616	-2.508	0.000
7	0.000	-0.200	-0.171	-0.002	-0.426	6.419	-0.269	-0.645	-0.704	-0.819	0.000
5	0.000	-0.055	-0.047	0.069	-0.360	6.496	-0.222	-0.566	-0.173	0.424	0.000
3	0.000	0.015	0.016	0.095	-0.347	6.499	-0.239	-0.538	0.079	1.049	0.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE B4.—Continued.

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	-0.663	-0.799	-1.345	-1.605	-0.805	-0.603	-3.889	0.572	-0.125	0.000
75	0.000	-0.889	-0.918	-1.363	-1.564	-0.809	-0.587	-3.009	0.329	-0.294	0.000
73	0.000	-1.356	-1.184	-1.454	-1.531	-0.829	-0.584	-2.280	-0.420	-0.669	0.000
71	0.000	-2.185	-1.696	-1.659	-1.491	-0.869	-0.601	-1.750	-2.379	-1.537	0.000
69	0.000	-3.510	-2.600	-2.058	-1.455	-0.945	-0.655	-1.403	-6.758	-3.427	0.000
67	0.000	-5.331	-3.986	-2.721	-1.460	-1.027	-0.755	-1.231	-13.924	-7.048	0.000
65	0.000	-7.330	-5.666	-3.620	-1.547	-1.077	-0.893	-1.174	-20.524	-12.052	0.000
63	0.000	-9.032	-7.202	-4.584	-1.715	-1.097	-1.011	-1.067	-23.347	-16.442	0.000
61	0.000	-10.215	-8.301	-5.386	-1.873	-1.146	-1.103	-0.802	-23.799	-19.425	0.000
59	0.000	-10.909	-8.944	-5.916	-2.018	-1.235	-1.180	-0.427	-23.341	-21.310	0.000
57	0.000	-11.250	-9.204	-6.185	-2.170	-1.354	-1.257	-0.026	-22.428	-22.228	0.000
55	0.000	-11.383	-9.170	-6.238	-2.343	-1.507	-1.345	0.307	-21.275	-22.420	0.000
53	0.000	-11.431	-8.938	-6.107	-2.521	-1.709	-1.450	0.454	-19.864	-22.053	0.000
51	0.000	-11.498	-8.604	-5.797	-2.706	-2.015	-1.572	0.340	-17.938	-21.129	0.000
49	0.000	-11.647	-8.193	-5.339	-2.909	-2.345	-1.689	-0.029	-15.004	-19.419	0.000
47	0.000	-11.869	-7.633	-4.787	-3.129	-2.650	-1.804	-0.643	-9.876	-16.304	0.000
45	0.000	-11.954	-7.236	-4.265	-3.340	-2.901	-1.911	-1.405	1.053	-10.175	0.000
43	0.000	-11.861	-7.056	-3.753	-3.469	-3.092	-1.999	-2.159	-148.068	3.982	0.000
41	0.000	-11.702	-6.943	-3.213	-3.475	-3.227	-2.056	-2.749	-83.585	-133.339	0.000
39	0.000	-11.337	-6.686	-2.676	-3.372	-3.292	-2.046	-3.067	-51.540	-72.433	0.000
37	0.000	-10.766	-6.217	-2.210	-3.165	-3.249	-1.983	-3.106	-37.784	-49.155	0.000
35	0.000	-10.145	-5.752	-1.851	-2.951	-3.156	-1.882	-2.998	-29.808	-39.214	0.000
33	0.000	-9.389	-5.271	-1.557	-2.732	-3.029	-1.760	-2.855	-24.315	-32.928	0.000
31	0.000	-8.558	-4.793	-1.311	-2.510	-2.877	-1.625	-2.723	-20.110	-27.763	0.000
29	0.000	-7.672	-4.314	-1.101	-2.284	-2.705	-1.486	-2.605	-16.592	-23.092	0.000
27	0.000	-6.759	-3.837	-0.924	-2.062	-2.514	-1.346	-2.478	-13.527	-18.892	0.000
25	0.000	-5.838	-3.355	-0.782	-1.840	-2.307	-1.207	-2.369	-10.900	-15.141	0.000
23	0.000	-4.869	-2.852	-0.678	-1.630	-2.092	-1.072	-2.267	-8.562	-11.693	0.000
21	0.000	-3.839	-2.319	-0.606	-1.436	-1.880	-0.949	-2.140	-6.513	-8.321	0.000
19	0.000	-2.775	-1.754	-0.543	-1.249	-1.673	-0.839	-1.956	-4.937	-5.478	0.000
17	0.000	-1.741	-1.182	-0.458	-1.044	-1.454	-0.714	-1.661	-3.801	-3.304	0.000
15	0.000	-0.867	-0.666	-0.330	-0.802	-1.203	-0.536	-1.251	-3.116	-2.078	0.000
13	0.000	-0.298	-0.297	-0.182	-0.558	-0.940	-0.315	-0.820	-2.694	-2.001	0.000
11	0.000	-0.035	-0.094	-0.059	-0.371	-0.709	-0.128	-0.482	-2.159	-2.341	0.000
9	0.000	0.054	-0.001	0.026	-0.249	-0.560	-0.001	-0.259	-1.445	-2.138	0.000
7	0.000	0.074	0.044	0.076	-0.178	-0.479	0.073	-0.128	-0.799	-1.451	0.000
5	0.000	0.065	0.061	0.087	-0.154	-0.452	0.098	-0.065	-0.387	-0.773	0.000
3	0.000	0.054	0.059	0.086	-0.147	-0.442	0.092	-0.045	-0.178	-0.329	0.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	0.190	0.296	0.526	0.670	0.336	0.547	2.698	-1.469	-0.099	0.000
75	0.000	-0.009	0.189	0.475	0.666	0.281	0.511	2.423	-1.974	-0.559	0.000
73	0.000	-0.374	-0.006	0.381	0.615	0.228	0.464	2.141	-2.960	-1.192	0.000
71	0.000	-0.979	-0.340	0.225	0.583	0.201	0.414	1.839	-4.659	-1.846	0.000
69	0.000	-1.945	-0.930	-0.053	0.538	0.208	0.355	1.468	-7.209	-2.359	0.000
67	0.000	-3.325	-1.892	-0.516	0.468	0.262	0.284	0.984	-10.005	-3.002	0.000
65	0.000	-5.041	-3.232	-1.195	0.370	0.382	0.216	0.382	-11.360	-4.688	0.000
63	0.000	-6.739	-4.678	-2.013	0.255	0.551	0.180	-0.281	-9.965	-7.155	0.000
61	0.000	-8.041	-5.840	-2.742	0.133	0.753	0.194	-0.982	-6.297	-10.097	0.000
59	0.000	-8.863	-6.551	-3.214	0.010	0.952	0.257	-1.799	-0.977	-13.847	0.000
57	0.000	-9.249	-6.843	-3.403	-0.086	1.136	0.356	-2.721	9.672	-17.409	0.000
55	0.000	-9.294	-6.798	-3.352	-0.158	1.299	0.488	-3.615	-133.444	-21.015	0.000
53	0.000	-9.109	-6.501	-3.113	-0.201	1.410	0.632	-4.342	-60.876	-32.869	0.000
51	0.000	-8.803	-6.025	-2.698	-0.211	1.362	0.769	-4.829	-38.372	-10.448	0.000
49	0.000	-8.505	-5.427	-2.110	-0.214	1.267	0.892	-5.092	-30.697	-15.658	0.000
47	0.000	-8.406	-4.789	-1.384	-0.219	1.147	1.001	-5.032	-26.256	-16.222	0.000
45	0.000	-8.222	-4.252	-0.664	-0.221	1.032	1.103	-4.606	-22.716	-15.874	0.000
43	0.000	-7.839	-3.875	-0.055	-0.168	0.931	1.197	-3.933	-19.644	-15.307	0.000
41	0.000	-7.364	-3.525	0.459	-0.041	0.834	1.278	-3.160	-16.904	-14.517	0.000
39	0.000	-6.700	-2.934	0.935	0.133	0.733	1.351	-2.425	-14.493	-13.731	0.000
37	0.000	-6.045	-2.457	1.199	0.259	0.642	1.391	-1.840	-12.589	-13.037	0.000
35	0.000	-5.333	-2.027	1.351	0.344	0.557	1.410	-1.368	-10.947	-12.174	0.000
33	0.000	-4.641	-1.644	1.421	0.392	0.473	1.405	-1.045	-9.488	-11.087	0.000
31	0.000	-3.995	-1.314	1.432	0.411	0.388	1.376	-0.831	-8.166	-9.807	0.000
29	0.000	-3.389	-1.031	1.395	0.409	0.300	1.324	-0.684	-6.941	-8.418	0.000
27	0.000	-2.830	-0.789	1.316	0.384	0.206	1.245	-0.582	-5.764	-7.006	0.000
25	0.000	-2.300	-0.565	1.192	0.333	0.098	1.134	-0.519	-4.574	-5.614	0.000
23	0.000	-1.727	-0.318	1.031	0.255	-0.033	0.986	-0.499	-3.362	-4.142	0.000
21	0.000	-1.104	-0.042	0.852	0.161	-0.181	0.795	-0.505	-2.303	-2.587	0.000
19	0.000	-0.480	0.236	0.680	0.080	-0.320	0.591	-0.501	-1.571	-1.137	0.000
17	0.000	0.039	0.454	0.533	0.039	-0.411	0.422	-0.459	-1.267	0.017	0.000
15	0.000	0.353	0.548	0.414	0.037	-0.432	0.327	-0.354	-1.486	0.399	0.000
13	0.000	0.446	0.503	0.318	0.048	-0.402	0.293	-0.203	-1.966	-0.306	0.000
11	0.000	0.393	0.388	0.258	0.066	-0.360	0.292	-0.056	-2.208	-1.543	0.000
9	0.000	0.283	0.274	0.229	0.081	-0.337	0.305	0.059	-2.075	-2.362	0.000
7	0.000	0.178	0.192	0.216	0.087	-0.336	0.315	0.136	-1.771	-2.563	0.000
5	0.000	0.098	0.131	0.200	0.085	-0.335	0.312	0.176	-1.519	-2.421	0.000
3	0.000	0.048	0.096	0.198	0.089	-0.334	0.307	0.198	-1.355	-2.206	0.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE B4.—Concluded.

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	-2.822	-59.501	6.016	7.143	6.021	2.701	4.494	-2.971	1.700	0.000
75	0.000	-3.468	20.737	5.206	6.271	5.168	2.378	4.013	-4.625	0.372	0.000
73	0.000	-9.258	7.488	4.622	5.554	4.425	2.094	3.540	-8.303	-1.297	0.000
71	0.000	4.879	4.387	4.298	5.088	3.951	1.943	3.175	-16.253	-2.549	0.000
69	0.000	1.490	3.079	4.113	4.860	3.766	1.955	2.916	-38.705	-1.363	0.000
67	0.000	0.539	2.284	4.004	4.862	3.861	2.143	2.714	-129.568	5.578	0.000
65	0.000	-0.415	1.442	3.841	5.118	4.261	2.564	2.653	-2.239	16.837	0.000
63	0.000	-1.554	0.390	3.494	5.613	5.050	3.437	3.222	-19.018	26.867	0.000
61	0.000	-2.572	-0.581	3.037	6.035	5.965	4.419	2.889	-20.524	34.523	0.000
59	0.000	-3.194	-1.151	2.671	6.127	6.614	4.921	1.653	-11.359	33.970	0.000
57	0.000	-3.300	-1.272	2.500	5.992	7.075	5.140	0.848	-2.870	31.741	0.000
55	0.000	-2.990	-1.041	2.503	5.757	7.433	5.238	0.439	1.153	28.190	0.000
53	0.000	-2.437	-0.572	2.636	5.481	7.521	5.254	0.257	2.370	24.407	0.000
51	0.000	-1.805	0.028	2.904	5.224	7.311	5.223	0.304	2.212	20.503	0.000
49	0.000	-1.249	0.662	3.316	4.995	7.005	5.154	0.451	1.432	16.635	0.000
47	0.000	-0.934	1.267	3.846	4.781	6.614	5.043	0.601	0.351	12.953	0.000
45	0.000	-0.998	1.738	4.407	4.586	6.156	4.897	0.750	-0.840	9.479	0.000
43	0.000	-1.090	1.921	4.805	4.377	5.649	4.716	0.918	-1.943	6.220	0.000
41	0.000	-0.988	2.016	4.996	4.147	5.105	4.494	1.095	-2.753	3.376	0.000
39	0.000	-0.824	2.122	5.053	3.898	4.547	4.240	1.260	-3.153	1.301	0.000
37	0.000	-0.551	2.262	4.999	3.652	4.059	3.973	1.389	-3.328	-0.165	0.000
35	0.000	-0.271	2.359	4.865	3.412	3.624	3.697	1.480	-3.340	-1.199	0.000
33	0.000	0.003	2.419	4.675	3.171	3.228	3.409	1.518	-3.211	-1.847	0.000
31	0.000	0.257	2.449	4.447	2.929	2.862	3.113	1.506	-2.953	-2.154	0.000
29	0.000	0.463	2.442	4.184	2.681	2.520	2.805	1.426	-2.613	-2.171	0.000
27	0.000	0.643	2.406	3.877	2.423	2.195	2.485	1.292	-2.226	-1.990	0.000
25	0.000	0.841	2.364	3.517	2.141	1.871	2.150	1.118	-1.772	-1.715	0.000
23	0.000	1.097	2.340	3.108	1.831	1.536	1.799	0.912	-1.193	-1.329	0.000
21	0.000	1.410	2.343	2.675	1.515	1.196	1.437	0.672	-0.636	-0.682	0.000
19	0.000	1.702	2.329	2.248	1.238	0.891	1.104	0.420	-0.325	0.233	0.000
17	0.000	1.810	2.183	1.830	1.022	0.665	0.842	0.194	-0.407	1.154	0.000
15	0.000	1.634	1.834	1.417	0.850	0.534	0.668	0.050	-1.008	1.404	0.000
13	0.000	1.273	1.361	1.054	0.711	0.483	0.569	0.009	-1.937	0.404	0.000
11	0.000	0.878	0.914	0.789	0.613	0.475	0.525	0.042	-2.691	-1.412	0.000
9	0.000	0.541	0.574	0.620	0.548	0.471	0.512	0.104	-3.024	-2.996	0.000
7	0.000	0.298	0.355	0.528	0.504	0.459	0.514	0.159	-3.016	-3.838	0.000
5	0.000	0.145	0.230	0.479	0.476	0.451	0.513	0.195	-2.838	-4.051	0.000
3	0.000	0.072	0.168	0.457	0.469	0.447	0.513	0.220	-2.646	-3.965	0.000
1	0.000	0.000	-119.754	0.000	0.000	0.000	-129.372	-122.401	-126.199	-130.257	0.000

RELATIVE FLOW ANGLE/GRID ANGLE DIFFERENCES

CP	HUB	SS11	SS13	SS17	SS21	SS25	SS29	SS33	SS37	SS39	SHROUD
79	0.000	10.262	10.173	8.993	8.760	7.393	6.280	6.637	3.455	4.417	0.000
77	0.000	10.238	10.174	9.030	8.823	7.489	6.414	6.731	3.605	4.502	0.000
75	0.000	10.200	10.196	9.260	9.137	7.861	6.768	7.006	3.890	4.693	0.000
73	0.000	10.134	10.304	9.884	9.935	8.591	7.288	7.469	4.164	4.756	0.000
71	0.000	9.956	10.486	10.765	11.222	9.512	7.737	8.202	4.382	4.464	0.000
69	0.000	8.426	9.441	10.851	12.535	10.001	7.537	9.653	4.666	3.295	0.000
67	0.000	1.384	2.530	7.603	12.118	8.833	6.160	11.472	6.204	0.974	0.000
65	0.000	-3.592	-2.181	3.968	9.393	6.789	4.700	10.487	12.878	10.769	0.000
63	0.000	-3.822	-2.925	1.970	7.023	5.586	3.786	7.128	14.951	27.265	0.000
61	0.000	-4.384	-3.743	0.329	5.240	5.029	3.278	4.494	14.118	28.479	0.000
59	0.000	-5.233	-4.419	-0.778	3.888	4.793	3.042	2.922	13.408	27.946	0.000
57	0.000	-5.687	-4.659	-1.333	2.981	4.823	3.000	1.908	12.552	26.882	0.000
55	0.000	-5.532	-4.422	-1.431	2.446	5.009	3.076	1.192	11.332	25.273	0.000
53	0.000	-4.980	-3.844	-1.204	2.180	5.118	3.210	0.690	9.854	23.365	0.000
51	0.000	-4.204	-3.043	-0.716	2.132	5.079	3.382	0.403	8.139	21.109	0.000
49	0.000	-3.323	-2.116	0.005	2.250	5.084	3.592	0.370	6.259	18.488	0.000
47	0.000	-2.516	-1.164	0.942	2.480	5.113	3.803	0.449	4.416	15.641	0.000
45	0.000	-2.012	-0.240	2.036	2.835	5.137	4.011	0.598	2.721	12.748	0.000
43	0.000	-1.644	0.544	3.147	3.272	5.151	4.212	0.817	1.234	9.889	0.000
41	0.000	-1.009	1.351	4.146	3.754	5.175	4.403	1.114	0.082	7.175	0.000
39	0.000	-0.064	2.338	5.056	4.261	5.234	4.587	1.477	-0.578	5.001	0.000
37	0.000	0.894	3.280	5.788	4.695	5.305	4.728	1.852	-0.911	3.425	0.000
35	0.000	1.784	4.089	6.355	5.044	5.376	4.831	2.228	-1.016	2.286	0.000
33	0.000	2.634	4.810	6.810	5.386	5.449	4.903	2.579	-0.930	1.537	0.000
31	0.000	3.436	5.455	7.186	5.673	5.526	4.952	2.892	-0.673	1.132	0.000
29	0.000	4.198	6.034	7.504	5.943	5.613	4.985	3.172	-0.273	1.026	0.000
27	0.000	4.951	6.561	7.773	6.201	5.714	5.006	3.408	0.232	1.164	0.000
25	0.000	5.739	7.078	7.995	6.450	5.828	5.019	3.617	0.843	1.445	0.000
23	0.000	6.594	7.631	8.192	6.705	5.959	5.040	3.819	1.644	1.856	0.000
21	0.000	7.597	8.302	8.436	7.028	6.154	5.113	4.041	2.575	2.653	0.000
19	0.000	8.731	9.097	8.789	7.518	6.528	5.357	4.380	3.510	4.073	0.000
17	0.000	9.817	9.879	9.152	8.057	7.076	5.916	5.059	4.532	6.150	0.000
15	0.000	10.446	10.289	9.225	8.343	7.298	6.232	5.809	5.063	7.805	0.000
13	0.000	10.810	10.456	9.204	8.520	7.332	6.244	6.066	4.351	7.155	0.000
11	0.000	10.878	10.501	9.192	8.694	7.453	6.358	6.386	4.006	6.229	0.000
9	0.000	10.702	10.394	9.153	8.783	7.488	6.395	6.512	3.801	5.524	0.000
7	0.000	10.502	10.278	9.090	8.775	7.412	6.332	6.563	3.619	5.005	0.000
5	0.000	10.381	10.216	9.036	8.756	7.357	6.325	6.776	3.751	4.969	0.000
3	0.000	9.907	10.193	9.006	8.746	7.325	6.291	6.655	3.415	4.451	0.000
1	0.000	10.270	10.184	9.002	8.762	7.347	6.222	6.546	3.441	4.401	0.000

VIII. REFERENCES

1. Woods, J.R., Jr.: The Analytical Treatment of Secondary Flows and Associated Losses in Axial-Flow Turbomachines. Report AD-734983, Naval Postgraduate School, Monterey, CA, 1971.

2. Owen, A.K.: Effects of Inlet Distortion on the Development of Secondary Flows in a Subsonic Axial Inlet Compressor Rotor. NASA TM-104356, 1991.

3. Durst, F.; Melling, A.; and Whitlaw, J. H.: Principles and Practice of Laser Doppler Anemometry. Academic Press, 1976.

4. Lectures for the International Short Course on Laser Velocimetry. Purdue University, W. Lafayette, IN, Mar. 25-29, 1974.

5. Laser Velocimetry Systems. Catalog, TSI Inc., St. Paul, MN.

6. Powell, J.A.; Strazisar, A.J.; and Seasholtz, R.G.: High-Speed Laser Anemometer System for Intra-Rotor Flow Mapping in Turbomachinery. NASA TP-1663, 1982.

7. Powell, J.A.; Strazisar, A.J.; and Seasholtz, R.G.: Efficient Laser Anemometer for Intra-Rotor Flow Mapping in Turbomachinery. Measurement Methods in Rotating Components of Turbomachinery, B. Lakshiminarayana and P. Rundstadler, Jr., eds., ASME, 1980, pp. 157-164.

8. Strazisar, A.J.; and Powell, J.A.: Laser Anemometer Measurements in a Transonic Axial Flow Compressor Rotor. Measurement Methods in Rotating Components of Turbomachinery, B. Lakshiminarayana and P. Rundstadler, Jr., eds., ASME, 1980, pp. 165-176.

9. Stevenson, W.H.; Dos Santos, R.; and Mettler, S.C.: Fringe Mode Fluorescence Velocimetry. Applications of Non-Intrusive Instrumentation in Fluid Flow Research. AGARD CP-193, 1976, pp. 20-1, 20-9.

10. VAX, Technical Summary. Digital Equipment Corporation, 1982.

11. Model 1990B Signal Processor Counter Type Instruction Manual. Revision A, TSI P/N 1990147, TSI Inc., 1990.

12. Escort User's Manual, Data Systems and Analysis Branch, Computer Services Division, NASA Lewis Research Center, 1982.

13. Reid, L.; and Moore, R.D.: Design and Overall Performance of Four Highly Loaded, High Speed Inlet Stages for an Advanced High-Pressure-Ratio Core Compressor. NASA TP-1337, 1978.

14. Reid, L.; and Moore, R.D.: Performance of Single Stage Axial Flow Transonic Compressor with Rotor and Stator Aspect Ratios of 1.19 and 1.26, Respectively, and with Design Pressure Ratio of 1.82. NASA TP-1338, 1978.

15. Chima, R.V.; and Yokota, J.W.: Numerical Analysis of Three-Dimensional Viscous Internal Flows. First National Fluid Dynamics Congress, Technical Papers, AIAA, 1988, Pt. 1, pp. 17-24.

16. Chima, R.V.: Viscous Three-Dimensional Calculations of Transonic Fan Performance. Prepared for the AGARD Propulsion and Energetics Symposium on Computational Fluid Mechanics for Propulsion, San Antonio, TX, May 27-31, 1991.

17. Chima, R.V.: Tcgrid. Internal Publication, NASA Lewis Research Center, Turbomachinery Technology Branch, 1990.

18. Sorenson, R.L.: A Computer Program to Generate Two-Dimensional Grids About Airfoils and Other Shapes by the Use of Poisson's Equation. NASA TM-81198, 1980.

19. Baldwin, B.S.; and Lomax, H.: Thin-Layer Approximation and Algebraic Model for Separated Turbulent Flows. AIAA Paper 78-257, 1978.

20. Katsanis, T. and McNally, W.D.: Fortran Program for Calculating Velocities and Streamlines on the Hub-Shroud Mid-Channel Flow Surface of an Axial- or Mixed Flow Turbomachine. Programmer's Manual, Vol. 2. NASA TN D-7344, 1973.

21. Wagner, J.H.; Dring, R.P.; and Joslyn, H.D.: Axial Compressor Middle Stage Secondary Flow Study. NASA CR-3701, 1983.

22. Schenk, H.: Theories of Engineering Experimentation. Second ed., McGraw Hill, 1965, pp. 12-67.

23. Strazisar, A.J.: Laser Fringe Anemometry for Aero Engine Components. NASA TM-88798, 1986.

24. Seasholtz, R.G.: Laser Doppler Velocimeter Systems for Turbine Stator Cascade Studies and Analysis of Statistical Biasing Errors. NASA TN D-8297, 1977.

25. Strazisar, A.J.; and Powell, J.A.: Laser Anemometer Measurements in a Transonic Axial Compressor Rotor. Measurement Methods in Rotating Components of Turbomachinery; Proceedings of the Joint Fluids Engineering Gas Turbine Conference and Products Show, B. Lakshiminarayana and P. Rundstadler, eds., ASME, 1980, pp. 165-176.

26. Chima, R.V.: Internal Publication on Plotting Procedures in the Internal Fluid Mechanics Branch, Feb. 1981.

TABLE I.—LASER ANEMOMETER PROBE VOLUME SPECIFICATIONS

	Design criteria[a]	Measured throughflow[b]	Measured tangential flow[b]
Lens focal length, f	122 mm	122 mm	122 mm
Beam spacing	9. mm	8.832 mm	8.295 mm
Probe volume half crossing angle, κ	2.156°	2.073°	1.947°
Fringe spacing, d_f	6.838×10^{-3} mm	7.112×10^{-3} mm	7.572×10^{-3} mm
Beam waist diameter, $d_{e^{-2}}$	2.713×10^{-2} mm	2.713×10^{-2} mm	2.713×10^{-2} mm
Probe volume diameter, d_m	2.715×10^{-2} mm	2.7148×10^{-2} mm	2.7146×10^{-2} mm
Probe volume length, l_m	0.721 mm	0.75 mm	0.799 mm
Fringe volume (V_{fr})	2.782×10^{-4} mm^3	2.892×10^{-4} mm^3	3.079×10^{-4} mm^3
Number of fringes, N_{fr} unshifted	9	11	11

[a]All values are calculated using the measured crossing angles and a separation between the two parallel incoming beams of 9 mm.

[b]All values are calculated using the measured crossing angles and assume a focal length of 122 mm with parallel incoming beams.

TABLE II.—ESTIMATED INACCURACIES IN CONVENTIONAL INSTRUMENTATION AND RECORDING SYSTEMS

Flow, kg/sec	±0.3
Rotative speed, rpm	±30.
Survey flow angles, deg	±1.0
Temperatures, deg K	±0.6
Total pressures, N/cm^2	±0.17
Static pressures, N/cm^2	±0.10

TABLE III.—OVERALL DESIGN PERFORMANCE

PARAMETERS FOR ROTOR 35

Rotor total pressure ratio	1.865
Rotor total temperature ratio	1.225
Rotor adiabatic efficiency	0.865
Rotor polytropic efficiency	0.877
Rotor head rise coefficient	0.273
Flow coefficient	0.451
Weight flow per unit frontal area, kg/sec	100.808
Weight flow per unit annulus area, kg/sec	199.989
Weight flow, kg/sec	20.188
Design rpm	17188.7
Tip speed, m/sec	454.456
Hub/tip radius ratio	0.70
Rotor aspect ratio	1.19
Number of rotor blades	36

TABLE IV.—MERIDIONAL AND RADIAL COORDINATES OF THE ENDWALLS AND ROTOR BLADES

(a) Endwall coordinates

Hub axial position, cm	Hub radial position, cm	Shroud axial position, cm	Shroud radial position, cm
−22.86	17.526	−22.860	22.654
−15.40	17.526	−15.400	22.654
−7.62	17.526	−7.62	25.645
−2.588	17.539	−2.568	25.643
0.0	17.780	0.0	25.4
1.854	18.255	1.854	24.925
4.137	18.714	3.282	24.511
4.859	18.821	4.859	24.232
6.566	19.035	6.538	24.145
8.89	19.279	8.89	23.993
10.640	19.380	16.64	23.851
12.7	19.431	12.7	23.749
15.4	19.431	15.4	23.749

(b) Blade leading and trailing edge coordinates

Leading edge		Trailing edge	
Axial position, cm	Radial position, cm	Axial position, cm	Radial position, cm
0.	17.969	4.096	18.88
.039	18.849	4.017	19.466
.088	19.662	3.935	20.044
.140	20.428	3.852	20.616
.212	21.157	3.752	21.168
.286	21.856	3.675	21.719
.346	22.533	3.579	22.262
.410	23.197	3.533	22.796
.476	23.841	3.47	23.324
.544	24.480	3.404	23.849
.611	25.11	3.312	24.375

TABLE V.—LASER ANEMOMETER SURVEY LOCATIONS

Span, percent	Chord, percent	Axial position, cm	Radial position, cm	Goniometer offsets, deg.
5	Upstream survey location	-2.54	17.856	0.
10		-2.54	18.273	0.
20		-2.54	19.098	0.
30		-2.54	20.752	0.
40		-2.54	21.58	0.
50		-2.54	22.329	0.
60		-2.54	22.804	0.
70		-2.54	23.233	0.
80		-2.54	24.061	0.
90		-2.54	24.881	0.
5	−5 percent chord	-0.175	18.151	0.
10		-0.157	18.542	0.
20		-0.102	19.319	0.
30		-0.064	20.063	0.
40		0.018	20.825	0.
50		0.104	21.577	0.
60		0.183	22.329	0.
70		0.262	23.066	0.
80		0.348	23.807	0.
90		0.439	24.541	0.
5	5 percent chord	0.231	18.202	0.
10		0.244	18.588	-5.,0.,5.
20		0.290	19.352	-5.,2.,5.
30		0.318	20.081	-5.,2.,5.
40		0.378	20.833	-5.,2.,5.
50		0.450	21.575	-5.,0.,2., 4.,5.
60		0.513	22.316	-5.,2.,5.
70		0.562	23.066	-5.,2.,5.
80		0.648	25.238	-5.,2.,5.
90		0.724	26.501	0.,2.

TABLE V.—Continued.

5	25 percent chord	1.046	18.354	0.
10		1.049	18.677	-5.,-1.,5.
20		1.069	19.434	-5.,-1.,5.
30		1.074	20.137	-5.,-1., 4.,5.
40		1.102	20.851	-5.,-1., 0.,4.,5.
50		1.140	21.562	-5.,0,.5.
60		1.168	22.273	-5.,-2.16, 2.16,5.
70		1.204	22.974	-5.,4.,5.
80		1.247	23.683	-5.,4.,5.
90		1.290	24.381	2.
5	50 percent chord	2.065	18.545	-3.,-2.5, 2.5,3.
10		2.057	18.877	-3.,-2.5, 2.5,3.
20		2.045	19.545	-3.,-2.5, -2.5,3.
30		2.022	20.206	-3.,-2.5, -1.,1.,3.
40		2.007	20.876	-3.,-2.5, 2.5,3.
50		2.002	21.547	-3.,-1., 1.,3.
60		1.989	22.217	-3.,3.
70		1.989	22.885	-3.,3.
80		1.994	23.566	-3.,3.
90		2.002	24.229	0.
5	75 percent chord	3.086	18.733	-3.5,-.5
10		3.063	19.040	-5.,-3.5, 0.5
20		3.018	19.655	-5.5,0.
30		2.967	20.272	-6.,-0.6,0.
40		2.911	20.899	-6.,0., 1.,6.
50		2.865	21.529	-5.5,0.
60		2.860	22.164	-2.5, -2.469
70		2.774	22.799	-3.03
80		2.741	23.449	-4.
90		2.710	24.077	-2.,-4.

TABLE V.—Continued.

5	95 percent chord	3.901	18.885	-5.,-3.
10		3.868	19.169	-2.
20		3.797	19.741	-2.
30		3.724	20.328	-2.
40		3.635	20.917	-2.
50		3.553	21.518	-2.
60		3.465	22.121	-2.
70		3.401	22.728	-4.
80		3.340	23.355	-4.
90		3.277	23.957	-4.,0.
5	105 percent chord	4.308	18.933	0.
10		4.270	19.213	0.
20		4.188	19.769	0.
30		4.105	20.345	0.
40		3.995	20.925	0.
50		3.899	21.516	0.
60		3.795	22.111	0.
70		3.716	22.708	0.
80		3.640	23.327	0.
90		3.561	23.922	0.

TABLE VI.—ESTIMATED INACCURACIES IN LASER ANEMOMETRY INSTRUMENTATION

Probe volume position, mm	±0.05
Beam director setting angle, deg	±0.01
Statistical biasing error, maximum	1.0 percent
Window width velocity gradient error	2.0 percent
Particle velocity lag, leading edge region	10 percent
Particle angle lag, deg, blade trailing edge	6 percent

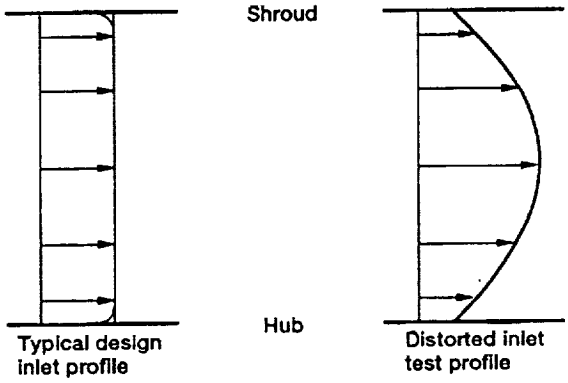
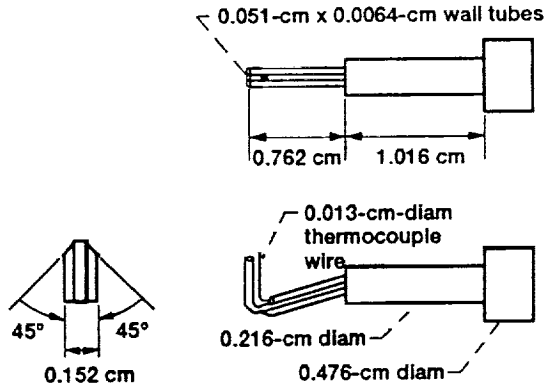
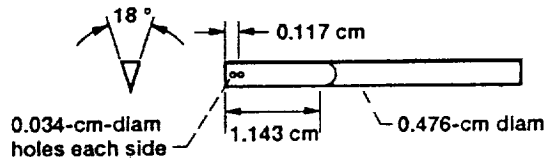


Figure 1.—Schematic of two test inlet profiles.



(a) Cobra probe for total pressure, total temperature, and andle measurements.



(b) Wedge probe for static pressure measurements.

Figure 2.—Aerodynamic survey probes.

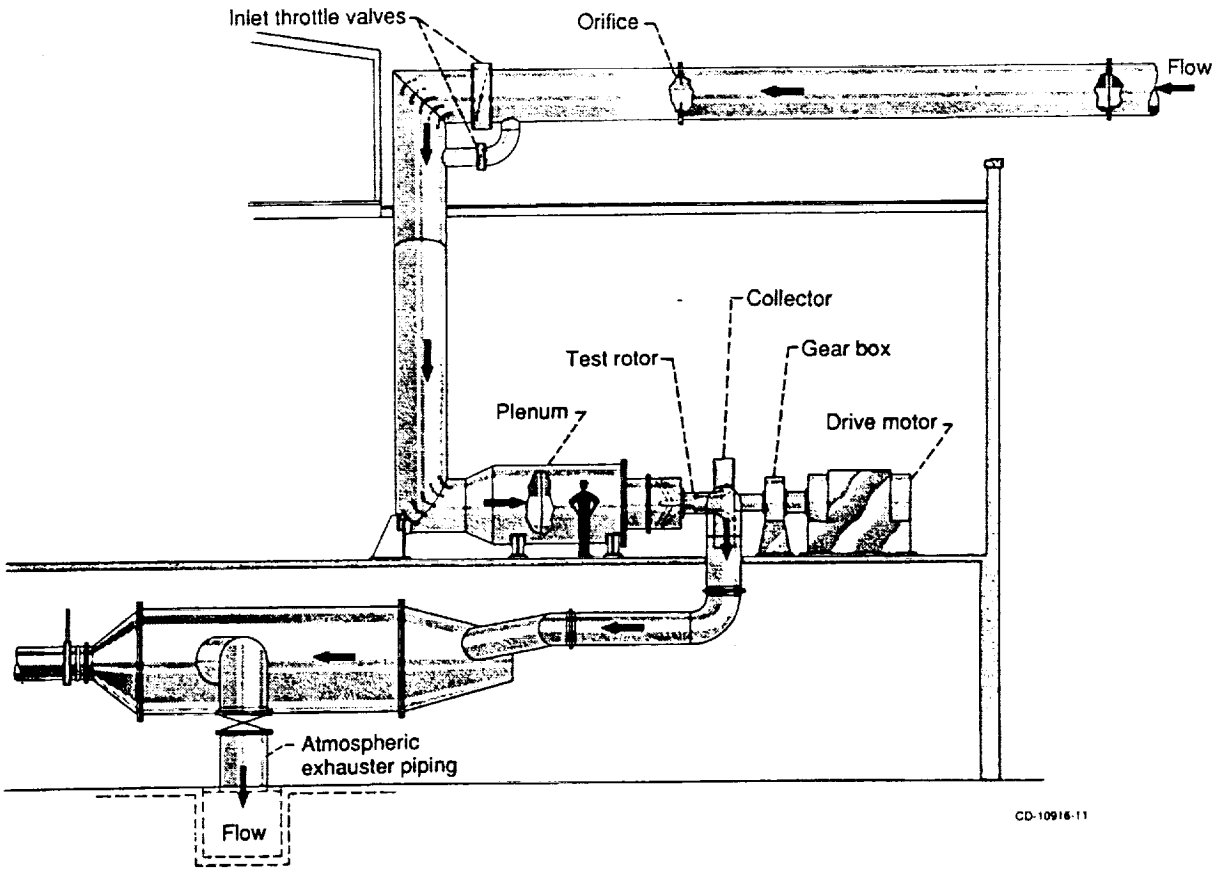


Figure 3.—Test facility.

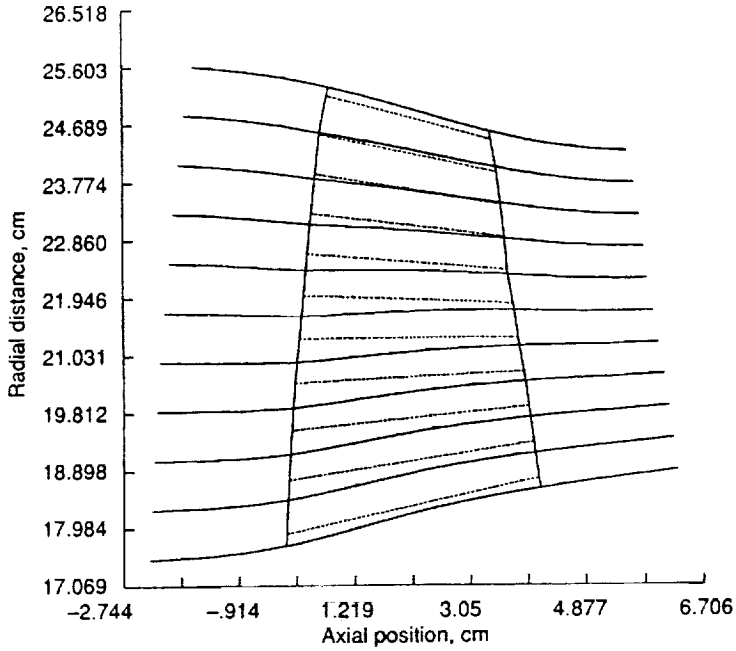


Figure 4.—Compressor rotor meridional view.

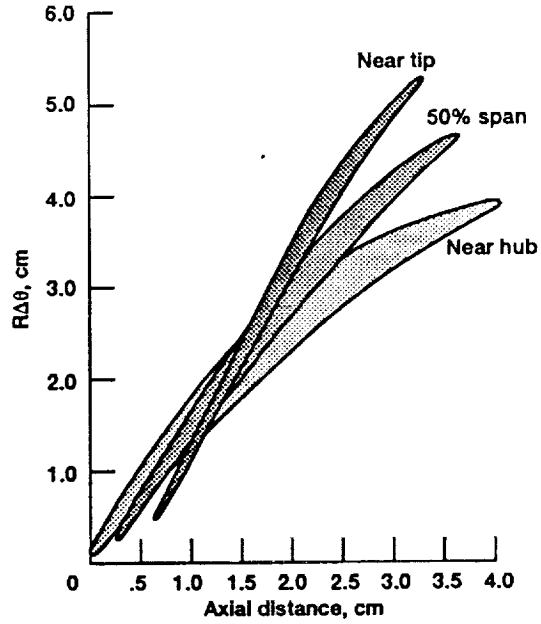
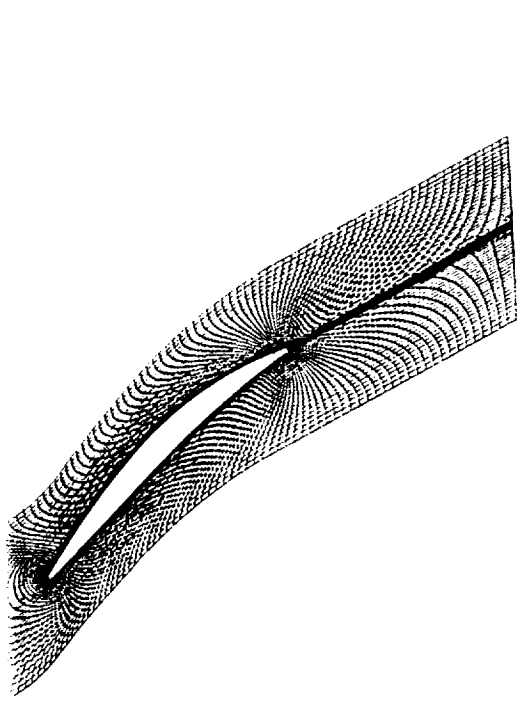
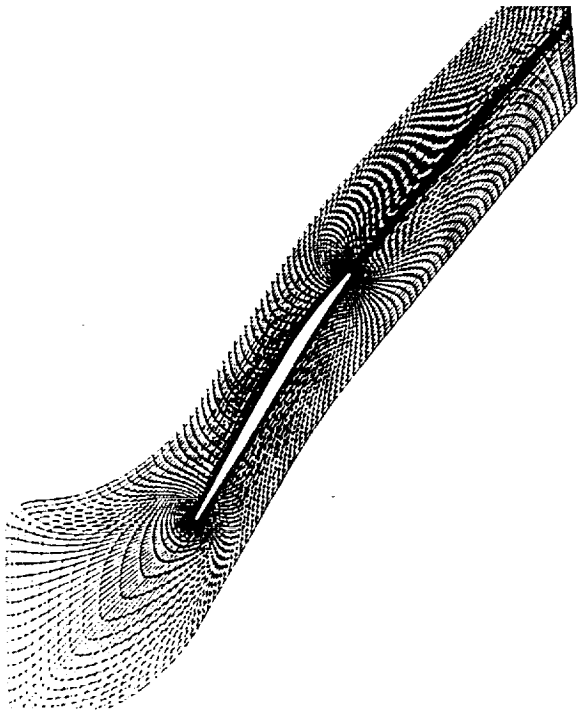


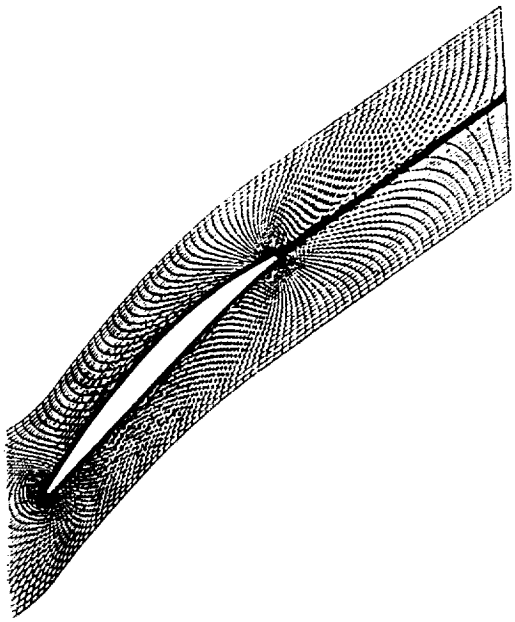
Figure 5.—Compressor rotor blade sections at three radial locations.



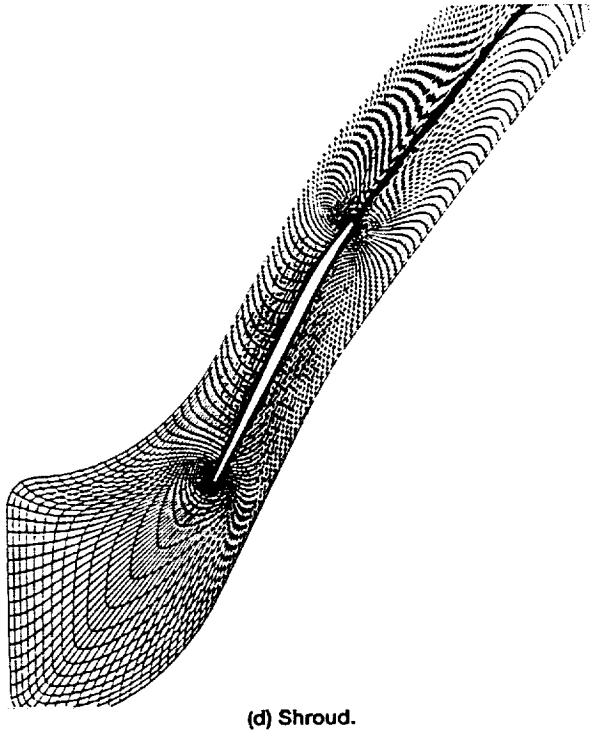
(a) Hub.



(c) Grid line 30.

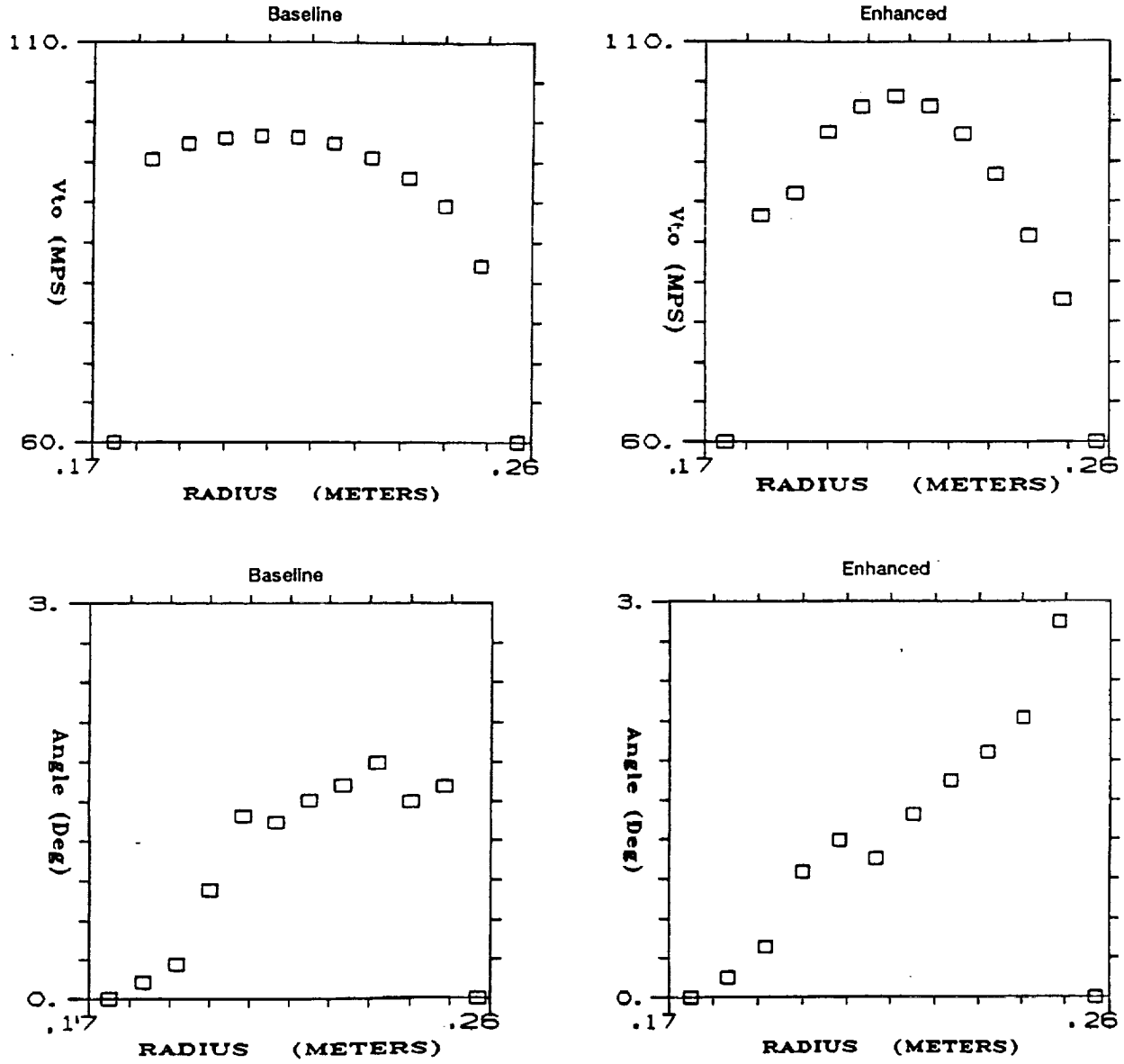


(b) Grid line 20.



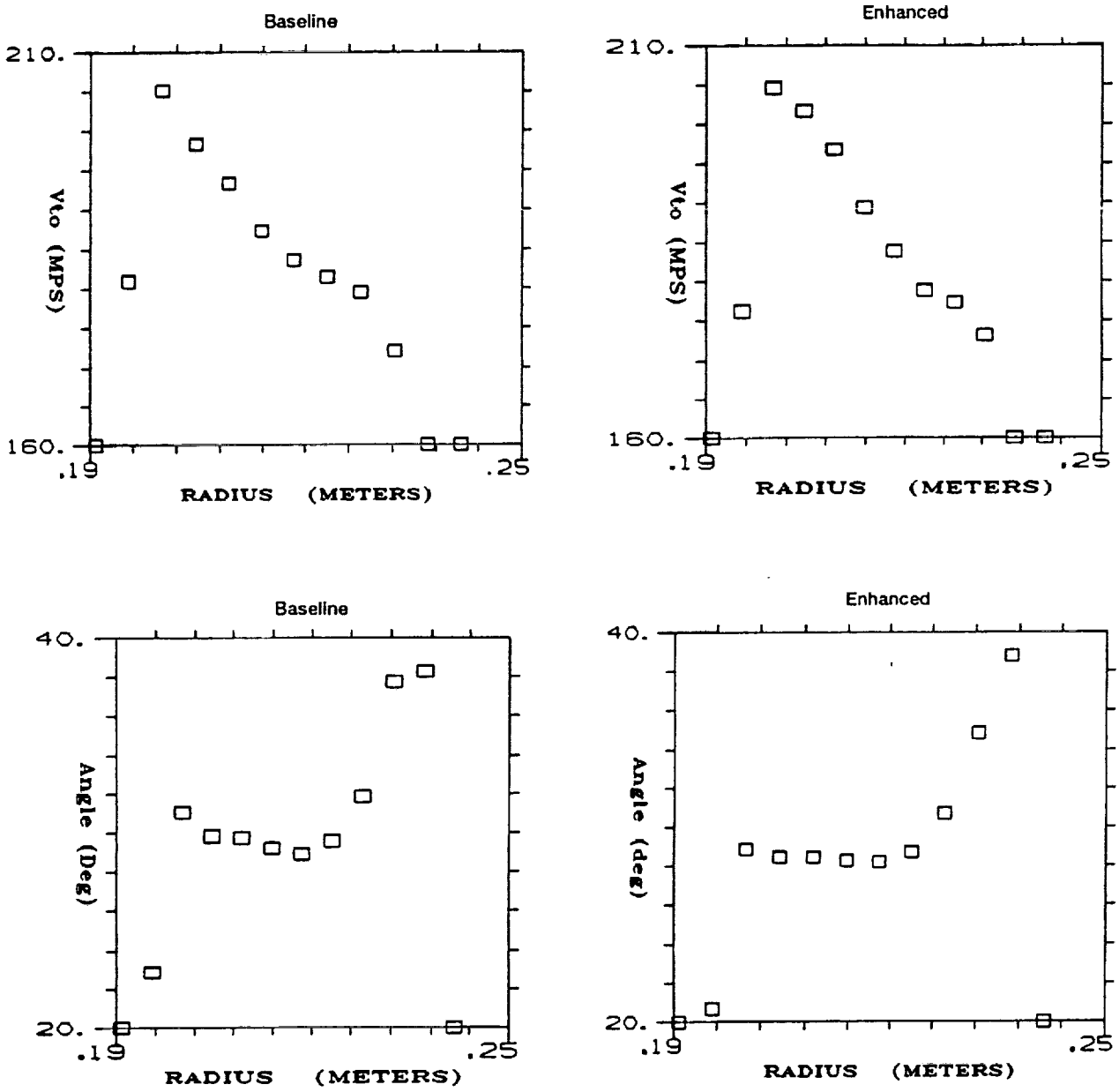
(d) Shroud.

Figure 6.—Typical blade-to-blade computational plane.



(a) Inlet aerosurvey.

Figure 7.—Aerosurveys.



(b) Exit aerosurvey.

Figure 7.—Concluded.

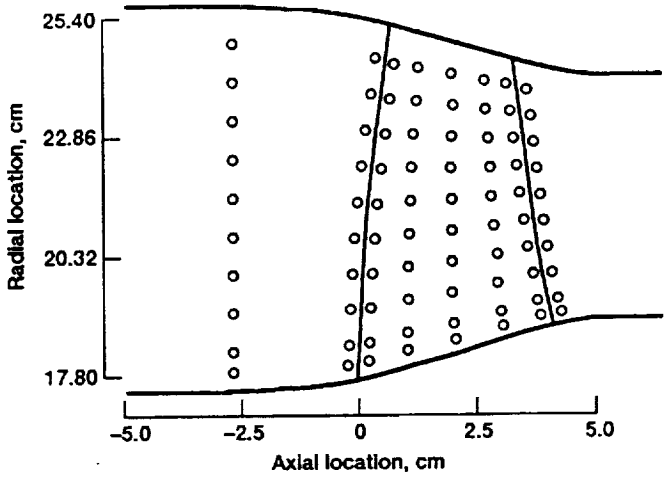


Figure 8.—Laser anemometer survey locations.

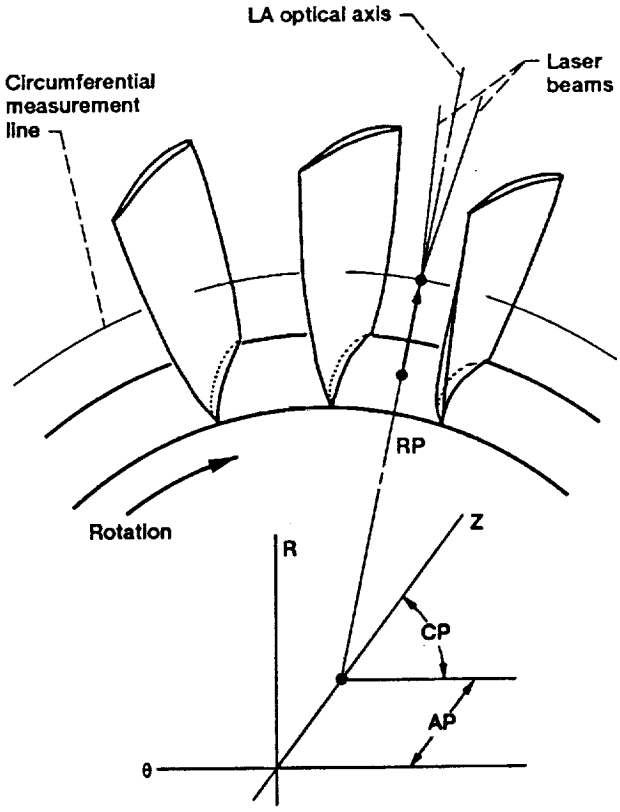
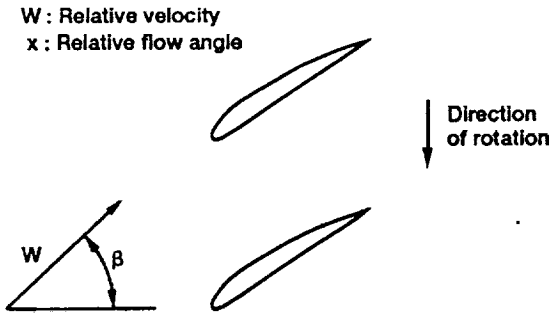
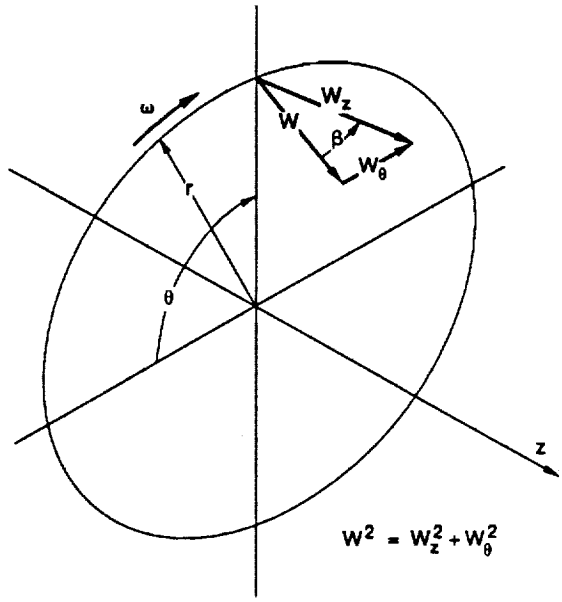


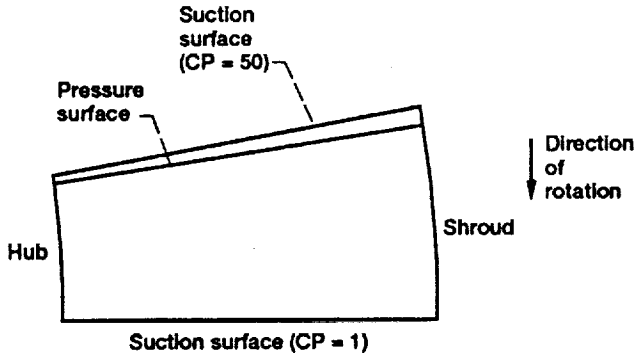
Figure 9.—Definition of circumferential measurement line.



(a) Blade-to-blade convention in the relative reference frame.

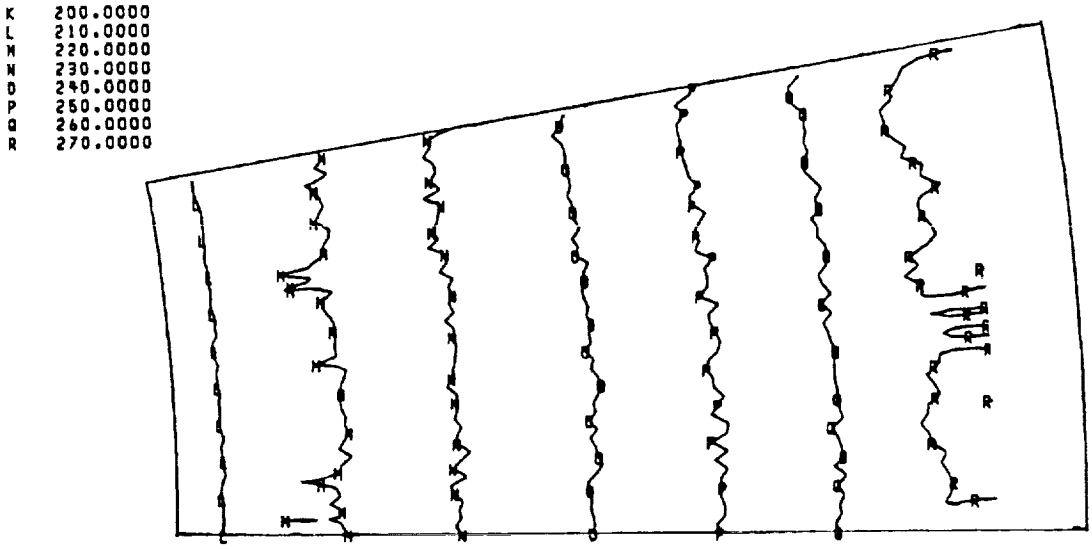


(b) Cylindrical coordinate system and velocity components.

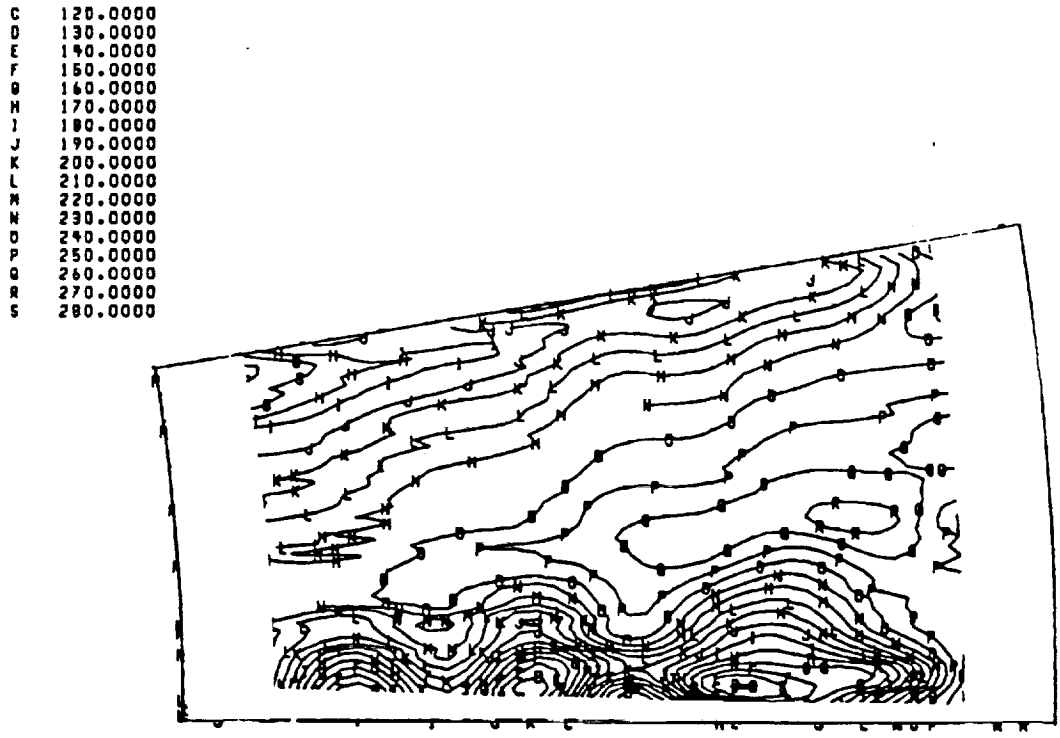


(c) Orientation of cross channel plots (experimental data)

Figure 10.—Geometry conventions.



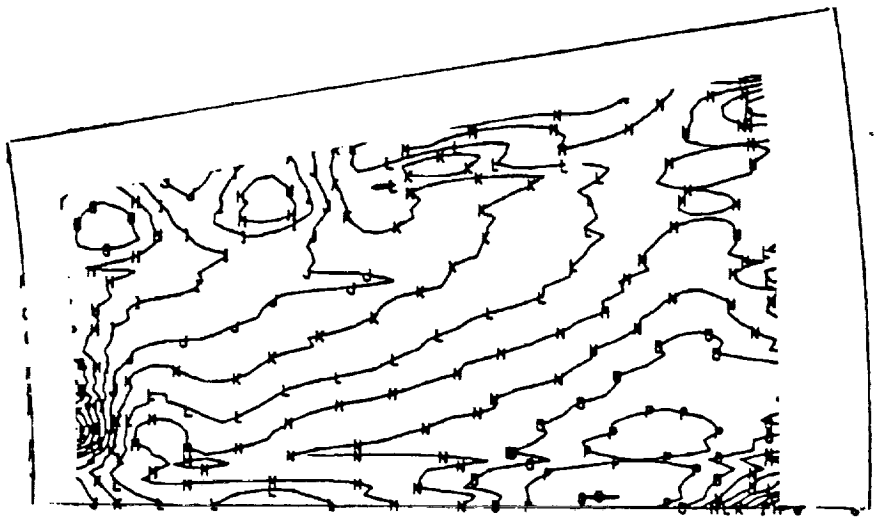
(a) Station 1.



(b) Station 3.

Figure 11.—Measured axial/relative tangential velocity.

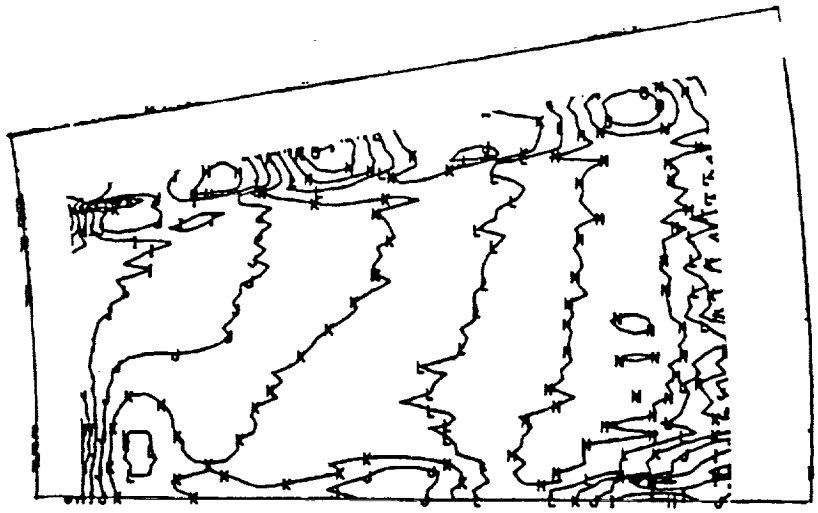
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C	120.0000
D	130.0000
E	140.0000
F	150.0000
G	160.0000
H	170.0000
I	180.0000
J	190.0000
K	200.0000
L	210.0000
M	220.0000
N	230.0000
O	240.0000
P	250.0000
Q	260.0000



Baseline

(c) Station 4.

B	110.0000
C	120.0000
D	130.0000
E	140.0000
F	150.0000
G	160.0000
H	170.0000
I	180.0000
J	190.0000
K	200.0000
L	210.0000
M	220.0000
N	230.0000
O	240.0000

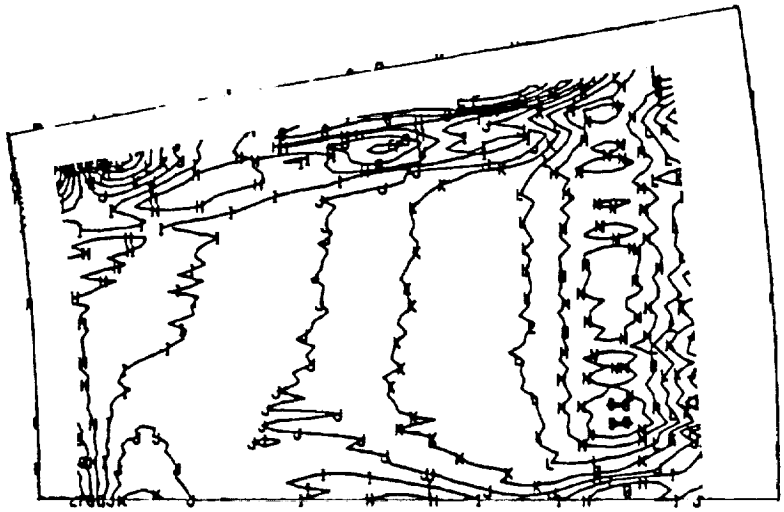


Baseline

(d) Station 5.

Figure 11.—Continued.

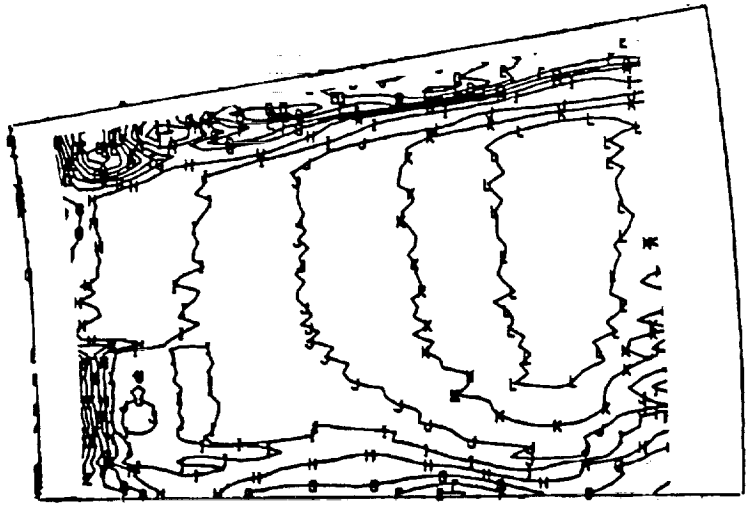
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H	170.0000
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K	200.0000
L	210.0000
M	220.0000
N	230.0000
O	240.0000



Baseline

(e) Station 6.

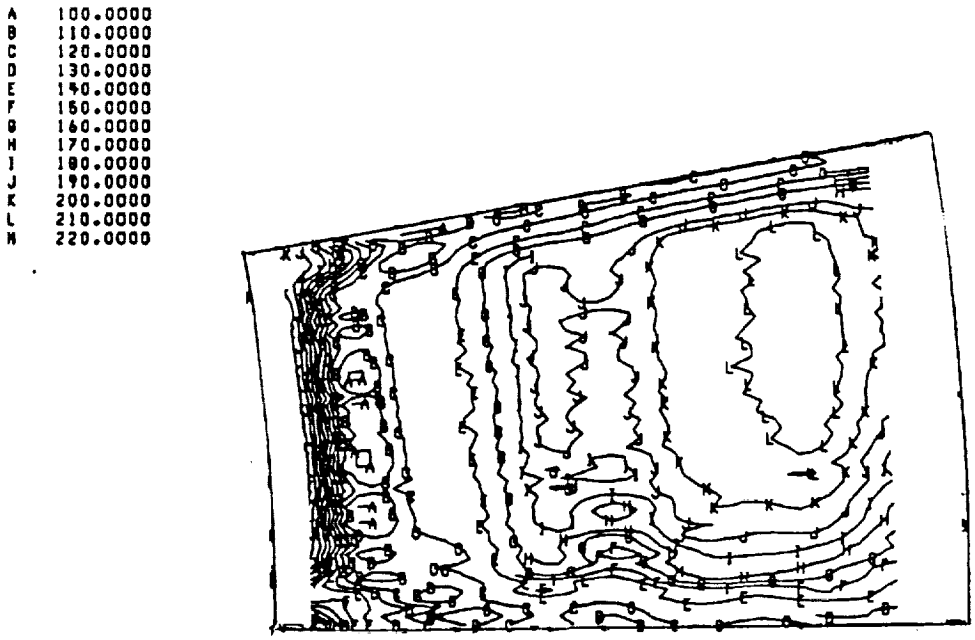
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D	130.0000
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H	170.0000
I	180.0000
J	190.0000
K	200.0000
L	210.0000



Baseline

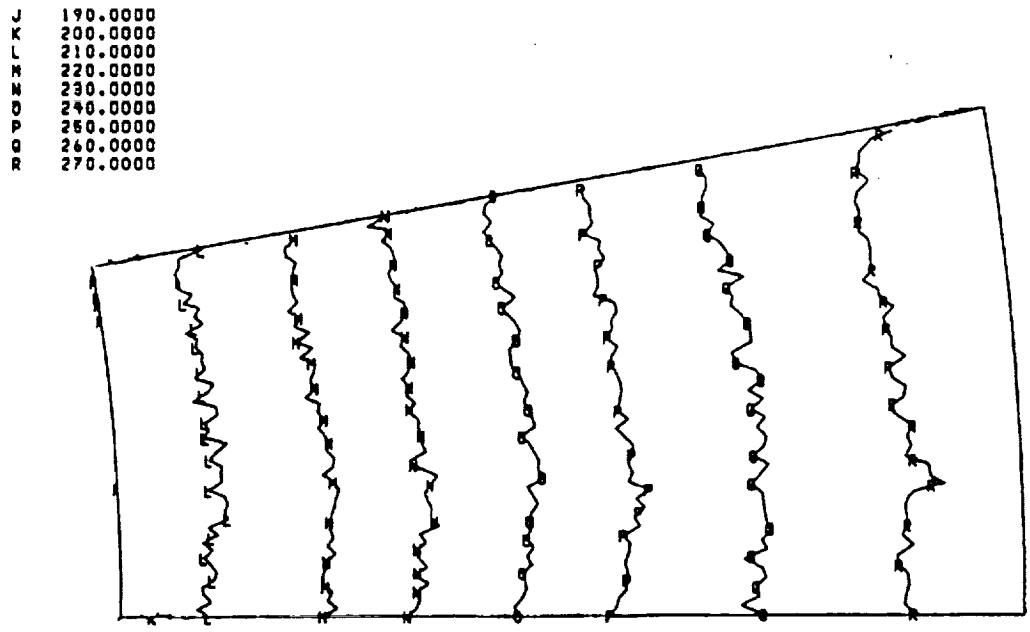
(f) Station 7.

Figure 11.—Continued.



Baseline

(g) Station 8.

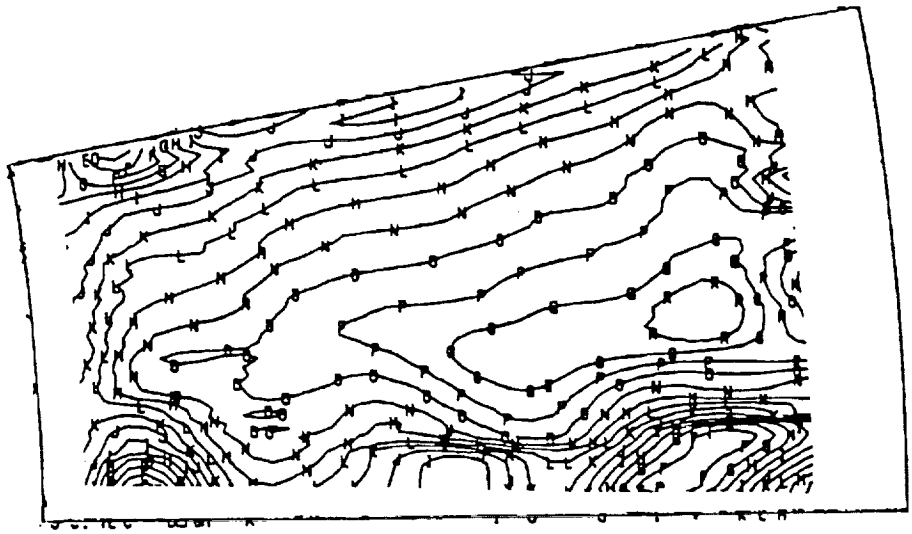


Enhanced

(h) Station 1.

Figure 11.—Continued.

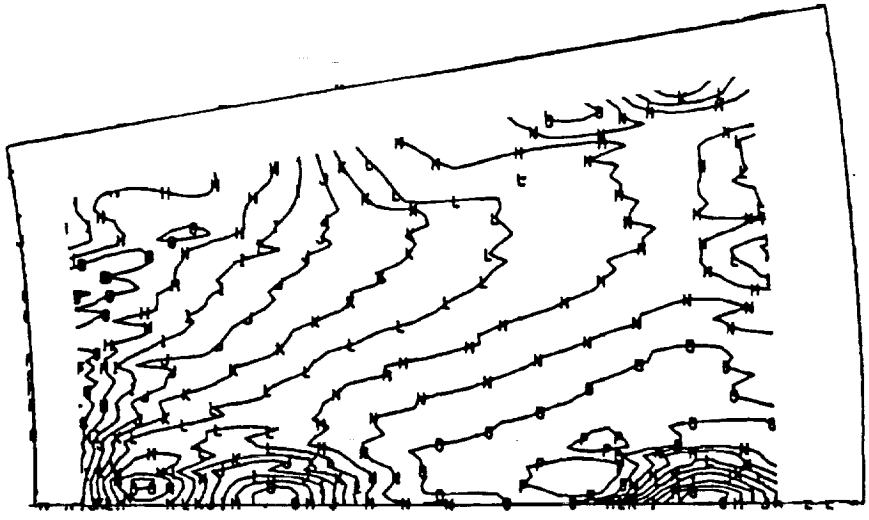
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I	180.0000
J	190.0000
K	200.0000
L	210.0000
M	220.0000
N	230.0000
O	240.0000
P	250.0000
Q	260.0000
R	270.0000



Enhanced

(i) Station 3.

D	130.0000
E	140.0000
F	150.0000
G	160.0000
H	170.0000
I	180.0000
J	190.0000
K	200.0000
L	210.0000
M	220.0000
N	230.0000
O	240.0000
P	250.0000



Enhanced

(j) Station 4.

Figure 11.—Concluded.

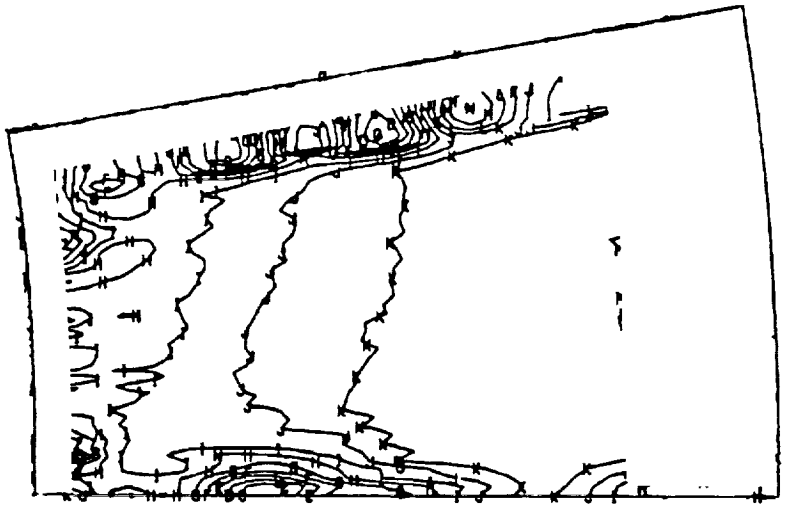
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F 150.0000
G 160.0000
H 170.0000
I 180.0000
J 190.0000
K 200.0000
L 210.0000
M 220.0000
N 230.0000
O 240.0000
P 250.0000



Enhanced

(k) Station 5.

A 100.0000
B 110.0000
C 120.0000
D 130.0000
E 140.0000
F 150.0000
G 160.0000
H 170.0000
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L 210.0000
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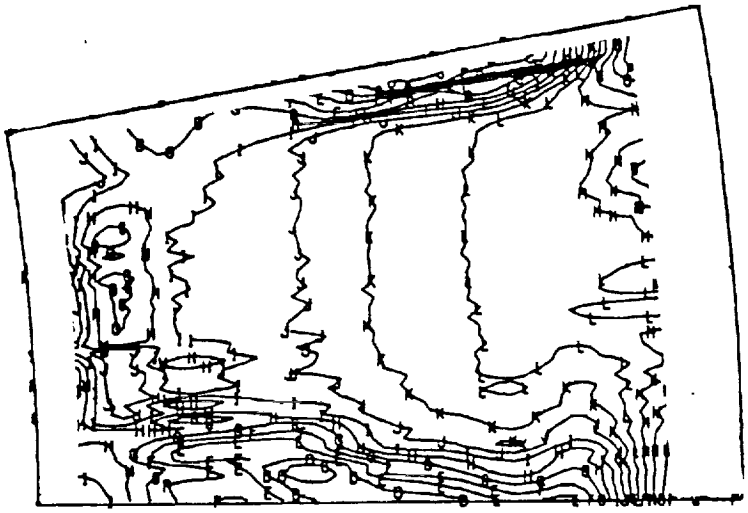


Enhanced

(l) Station 6.

Figure 11.—Continued.

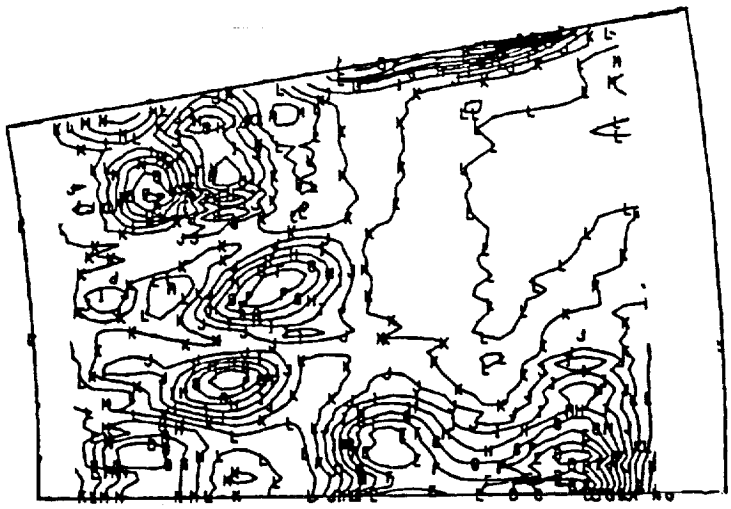
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J	190.0000
K	200.0000
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N	230.0000
O	240.0000
P	250.0000
Q	260.0000
R	270.0000



Enhanced

(m) Station 7.

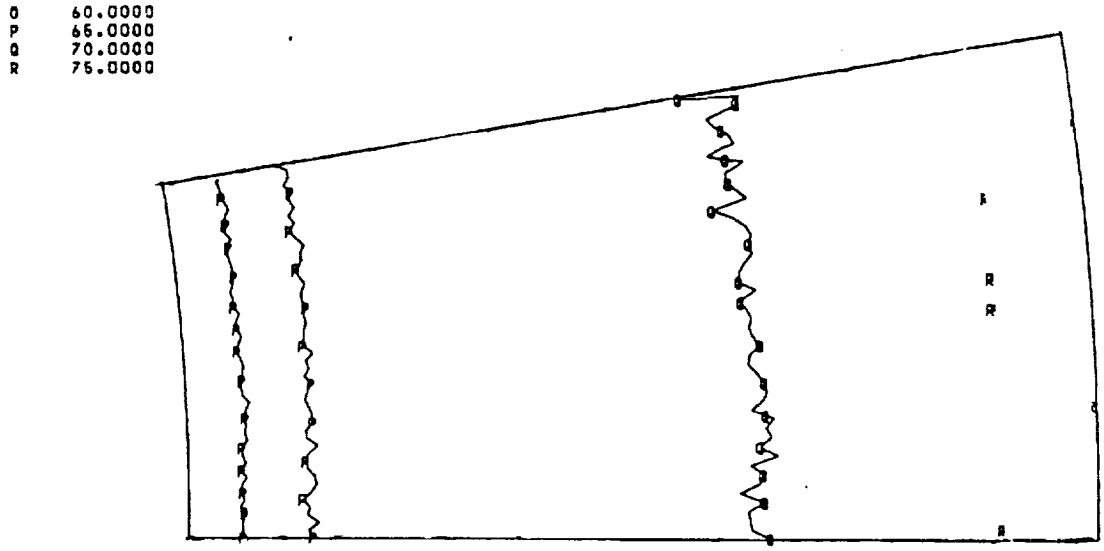
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H	170.0000
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N	230.0000
O	240.0000
P	250.0000



Enhanced

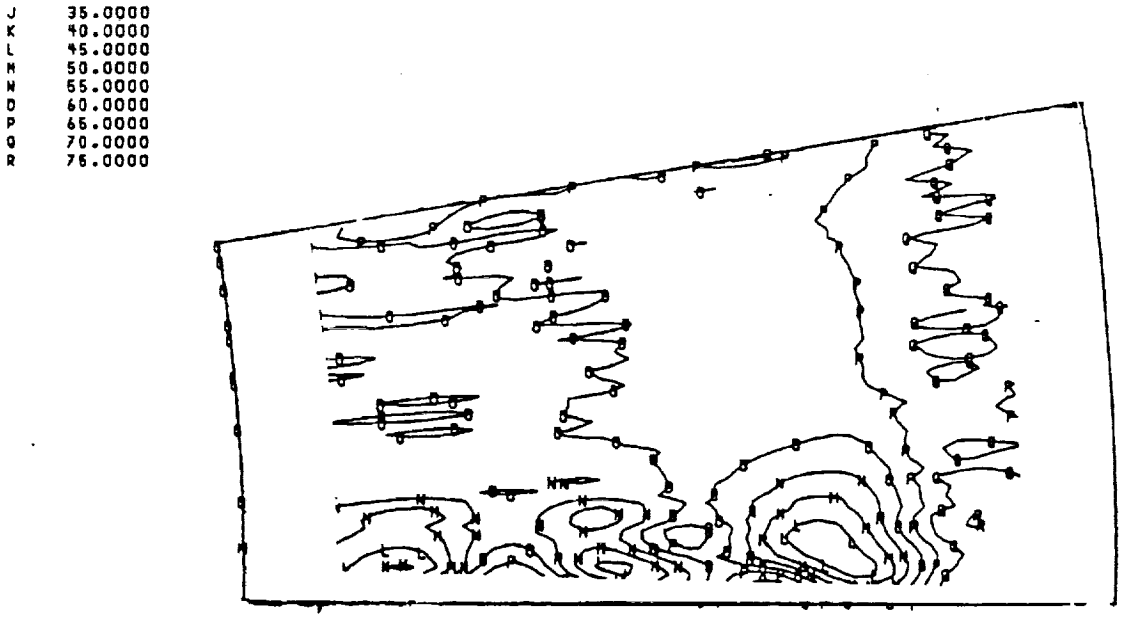
(n) Station 8.

Figure 11.—Concluded.



Baseline

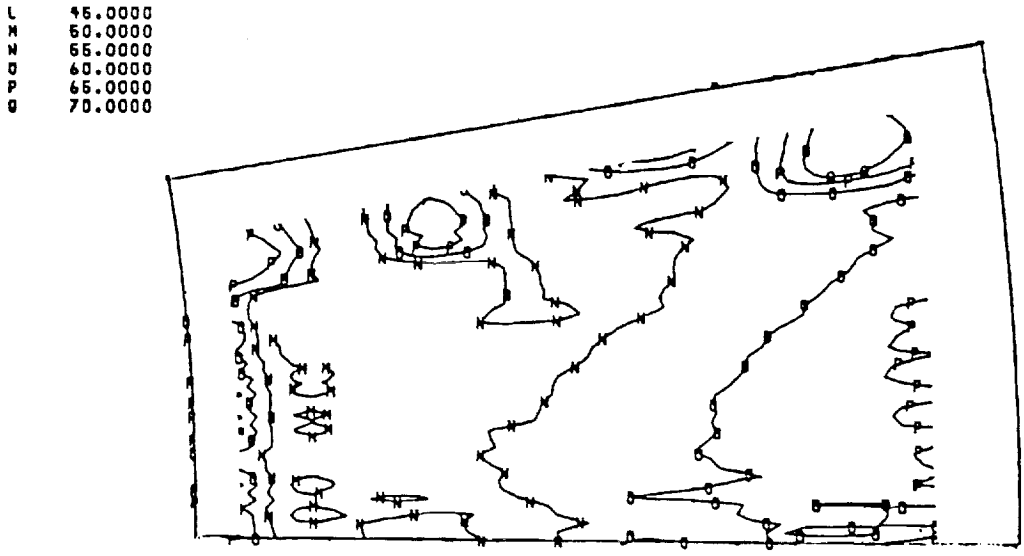
(a) Station 1.



Baseline

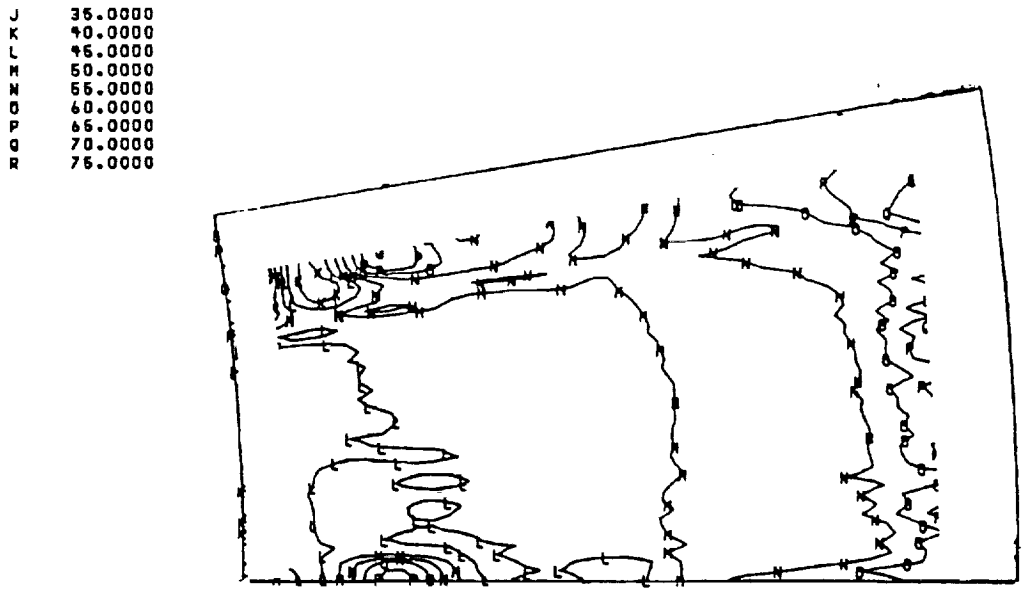
(b) Station 3.

Figure 12.—Relative flow angle.



Baseline

(c) Station 4.

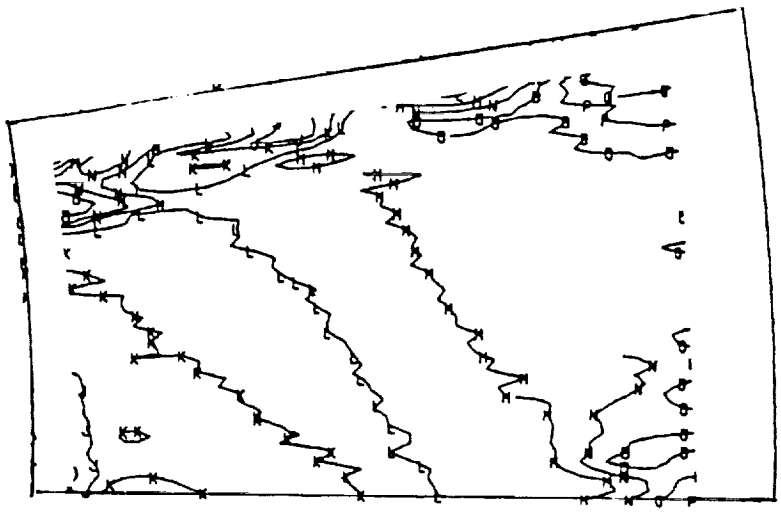


Baseline

(d) Station 5.

Figure 12.—Continued.

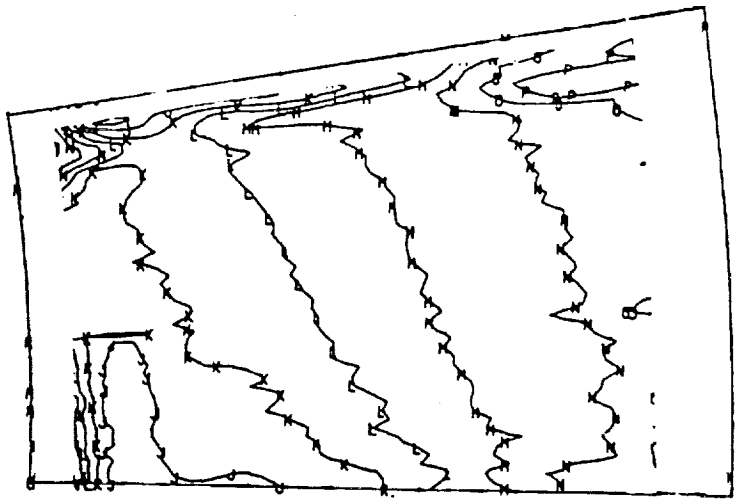
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I 30.0000
J 35.0000
K 40.0000
L 45.0000
M 50.0000
N 55.0000
O 60.0000
P 65.0000
Q 70.0000



Baseline

(e) Station 6.

H 25.0000
I 30.0000
J 35.0000
K 40.0000
L 45.0000
M 50.0000
N 55.0000
O 60.0000
P 65.0000

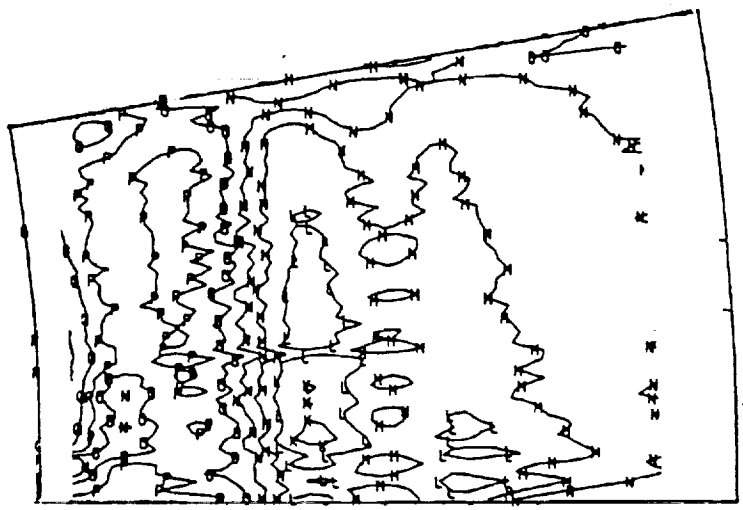


Baseline

(f) Station 7.

Figure 12.—Continued.

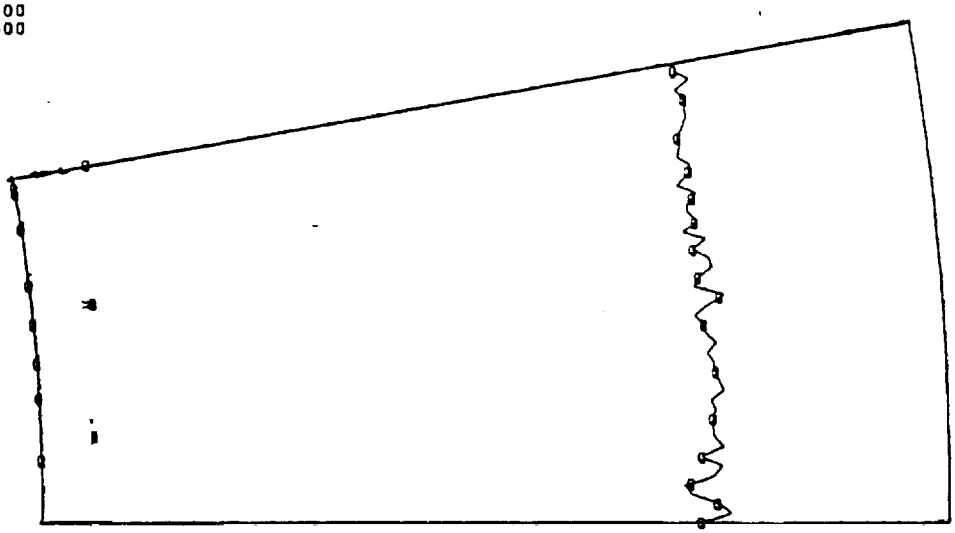
J 35.0000
K 40.0000
L 45.0000
M 50.0000
N 55.0000
O 60.0000
P 65.0000
Q 70.0000
R 75.0000



Baseline

(g) Station 8.

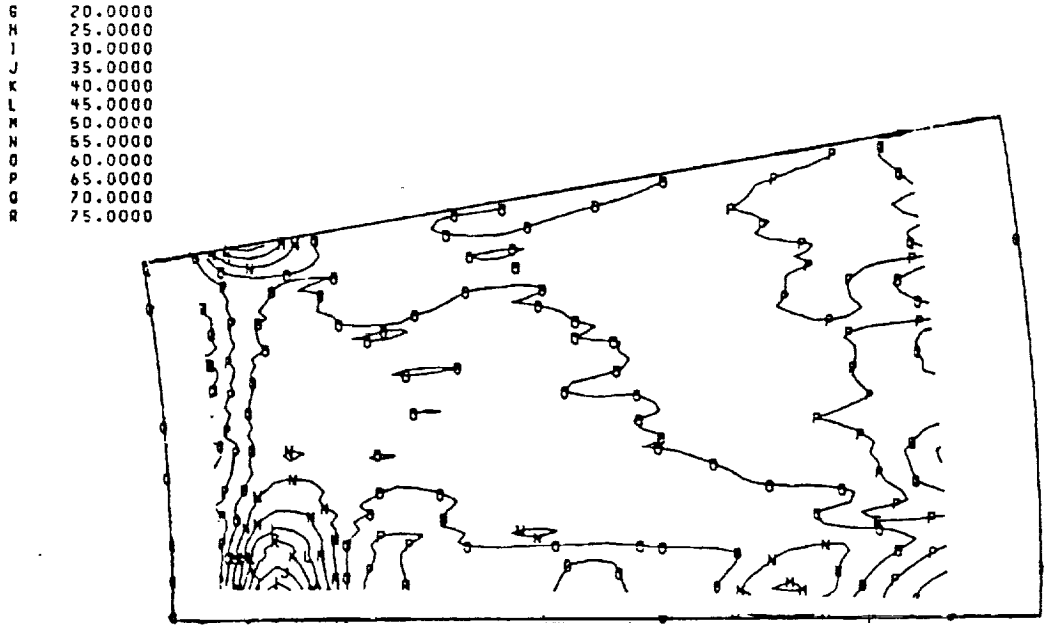
P 65.0000
Q 70.0000
R 75.0000



Enhanced

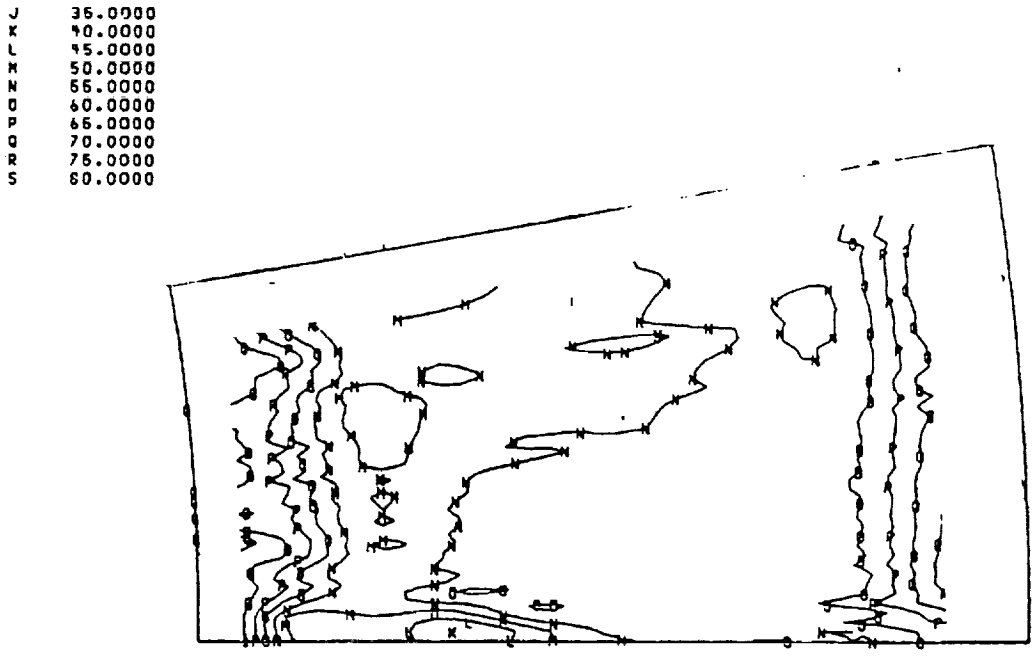
(h) Station 1.

Figure 12.—Continued.



Enhanced

(i) Station 3.

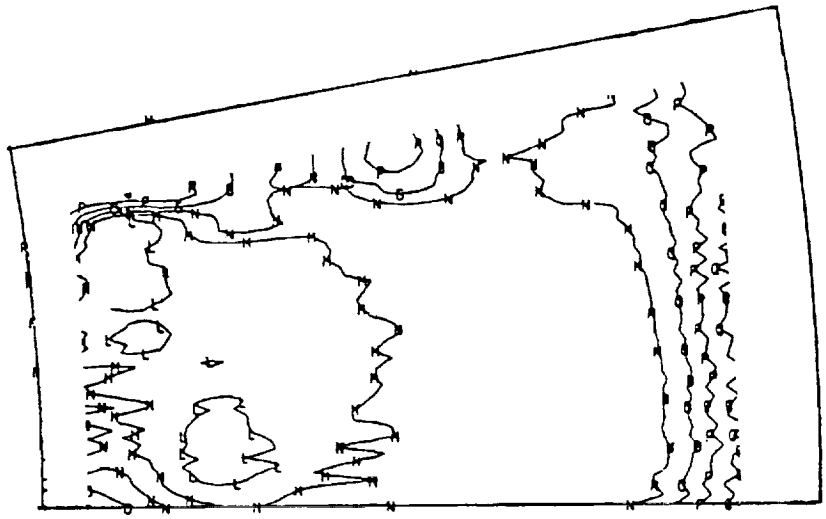


Enhanced

(j) Station 4.

Figure 12—Continued.

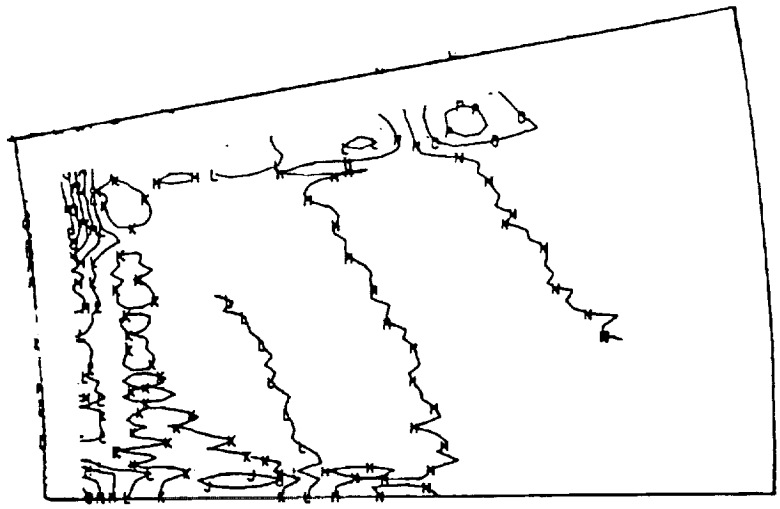
K 40.0000
L 45.0000
M 50.0000
N 55.0000
O 60.0000
P 65.0000
Q 70.0000
R 75.0000



Enhanced

(k) Station 5.

I 30.0000
J 35.0000
K 40.0000
L 45.0000
M 50.0000
N 55.0000
O 60.0000
P 65.0000
Q 70.0000

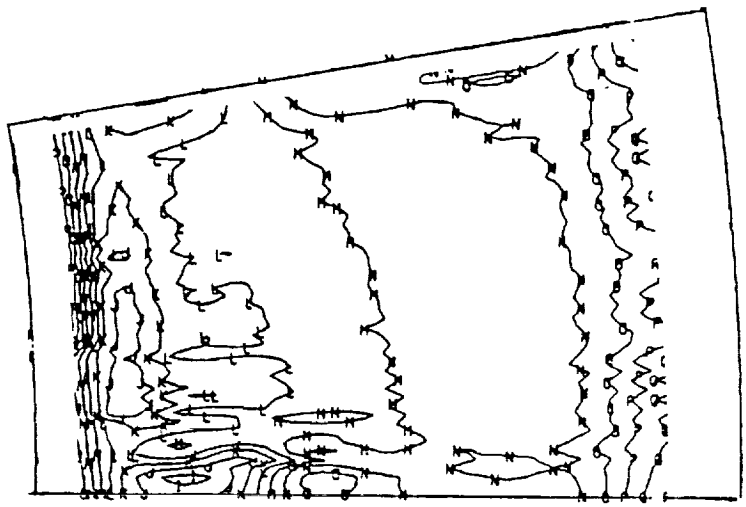


Enhanced

(l) Station 6.

Figure 12.—Continued.

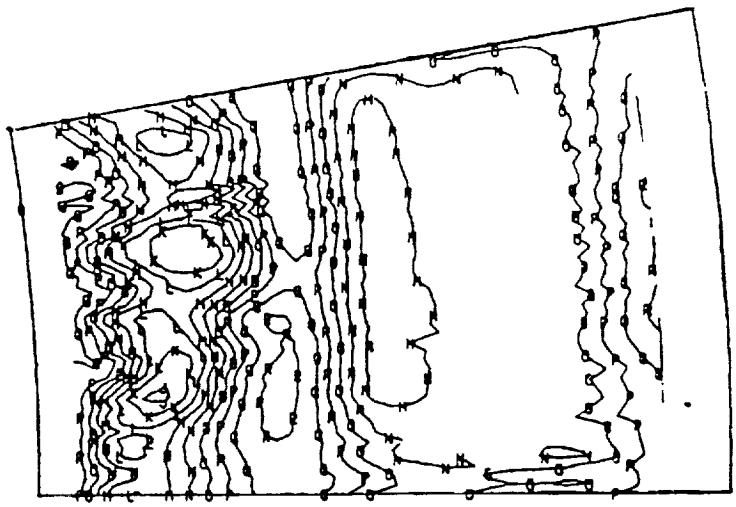
H 25.0000
I 30.0000
J 35.0000
K 40.0000
L 45.0000
M 50.0000
N 55.0000
O 60.0000
P 65.0000
Q 70.0000
R 75.0000
S 80.0000



Enhanced

(m) Station 7.

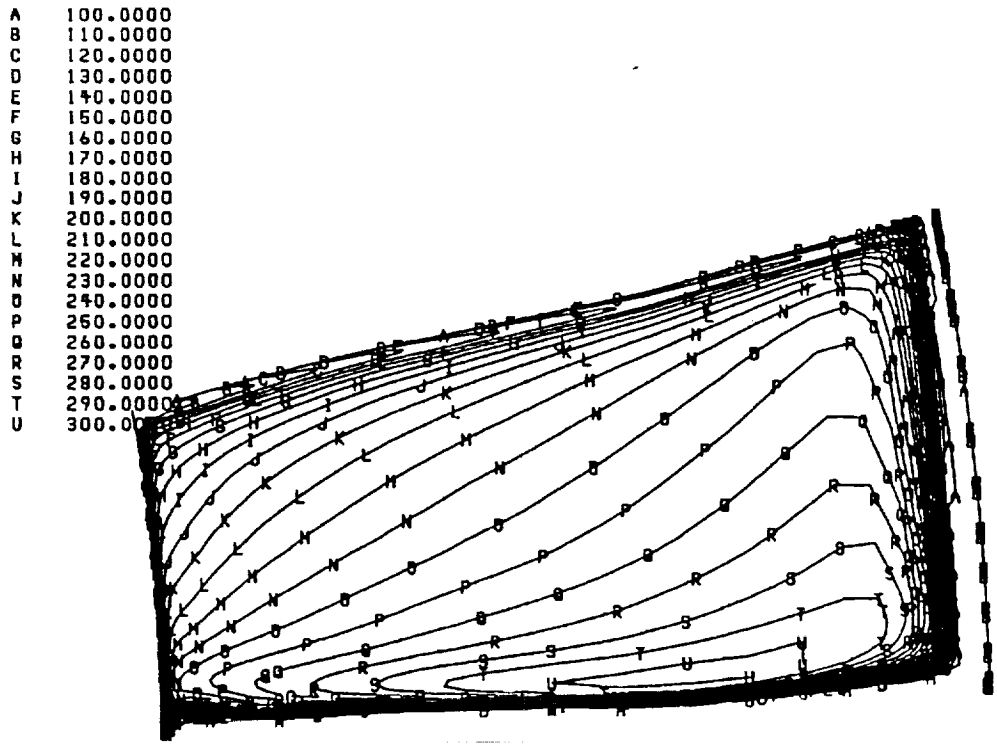
I 30.0000
J 35.0000
K 40.0000
L 45.0000
M 50.0000
N 55.0000
O 60.0000
P 65.0000
Q 70.0000
R 75.0000



Enhanced

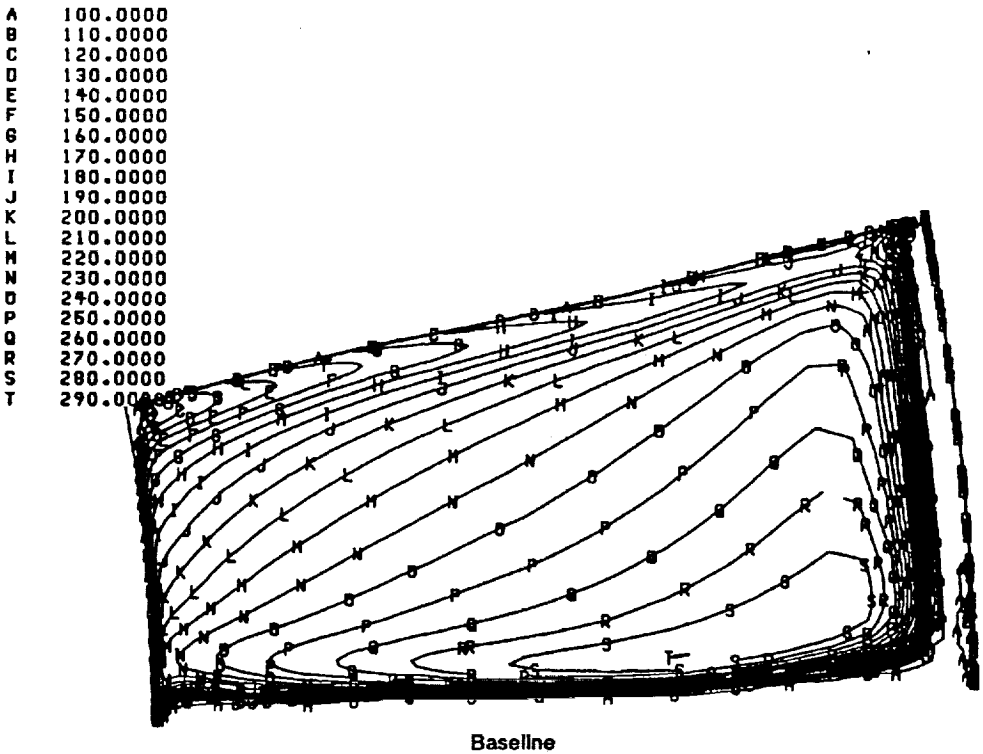
(n) Station 8.

Figure 12.—Concluded.



Baseline

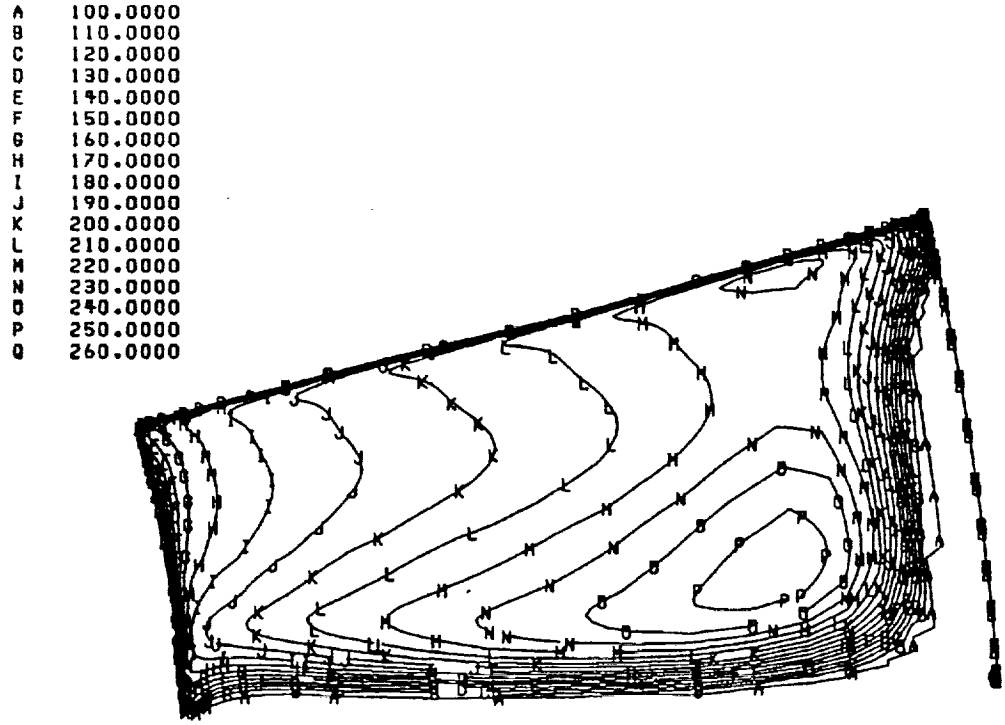
(a) Station 1.



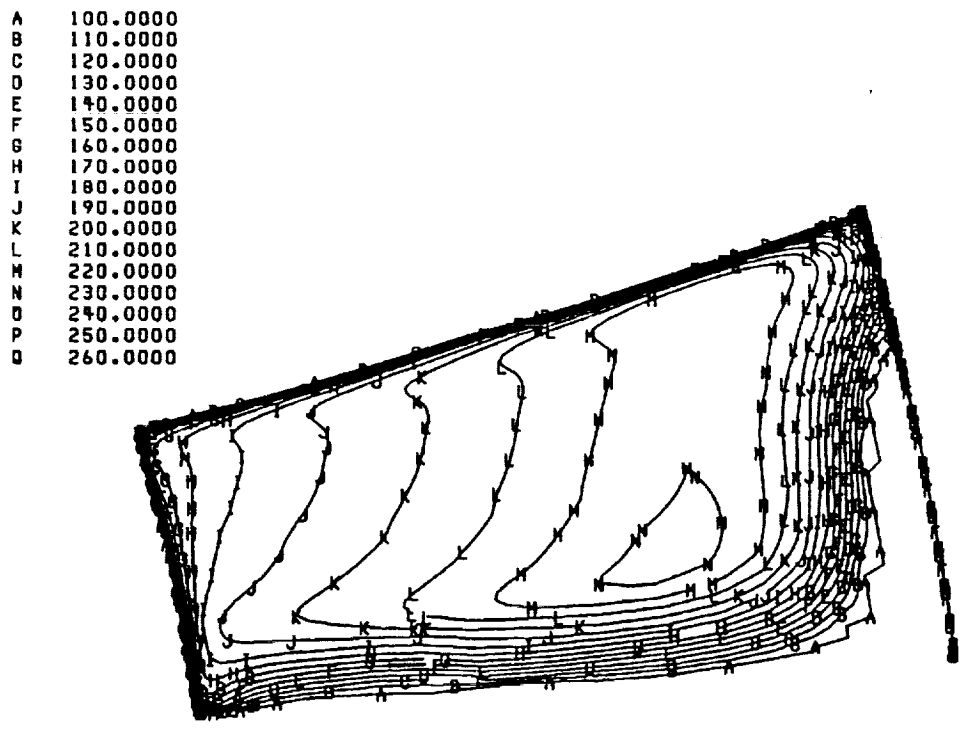
Baseline

(b) Station 3.

Figure 13.—Predicted axial/relative tangential velocities.

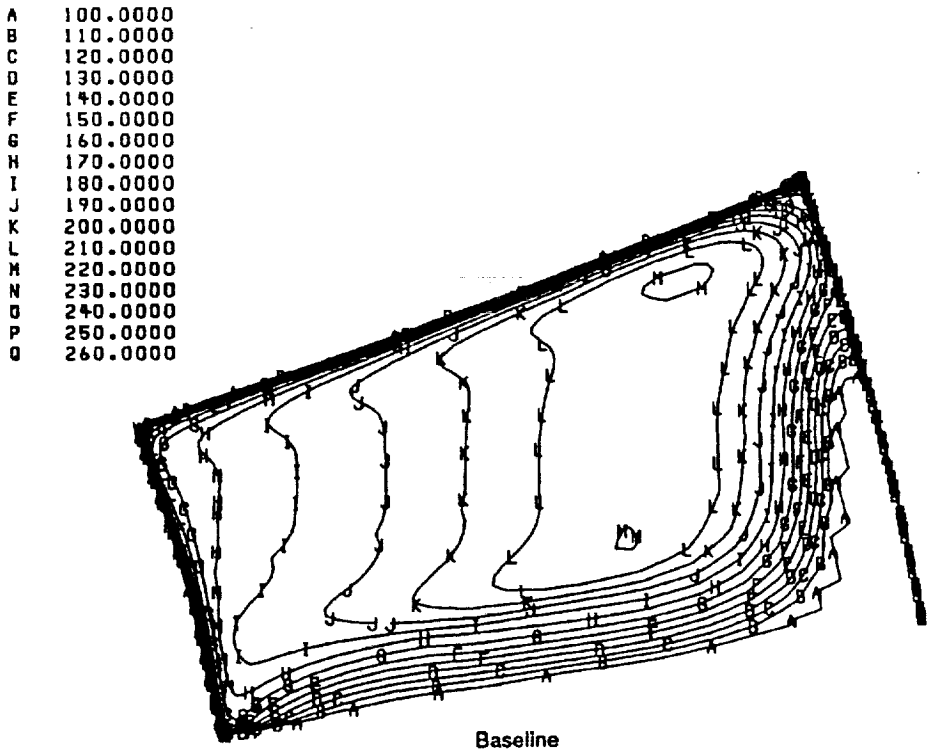


(c) Station 4.

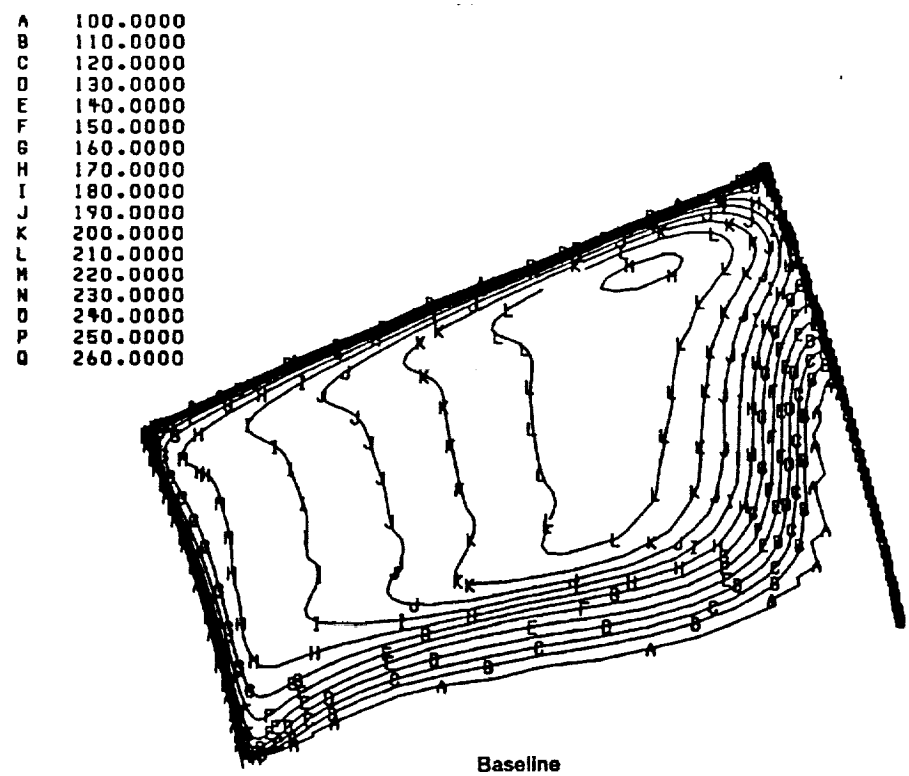


(d) Station 5.

Figure 13.—Continued.

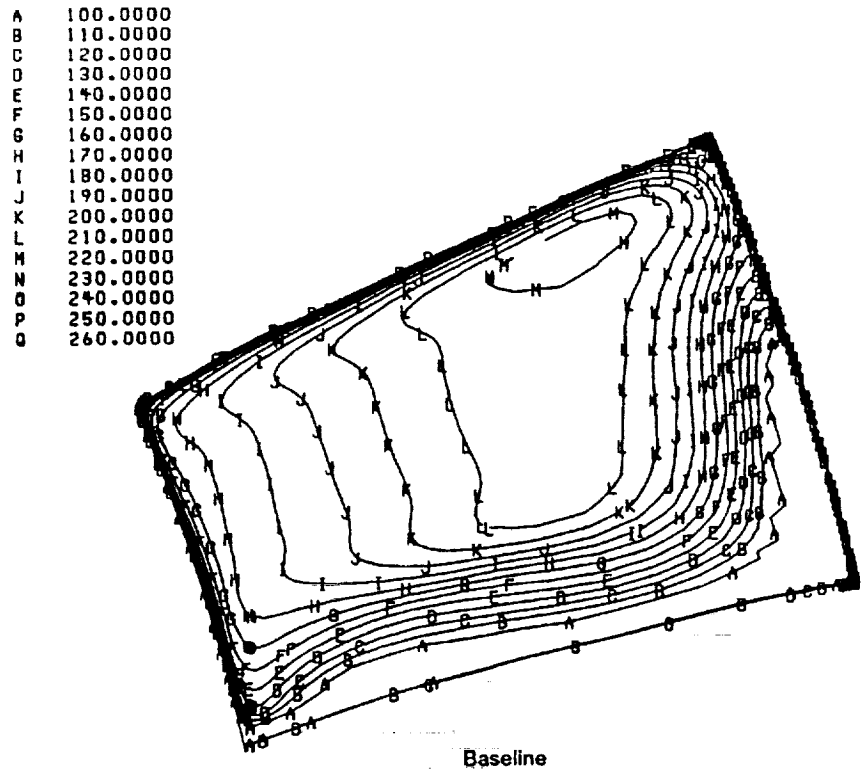


(e) Station 6.



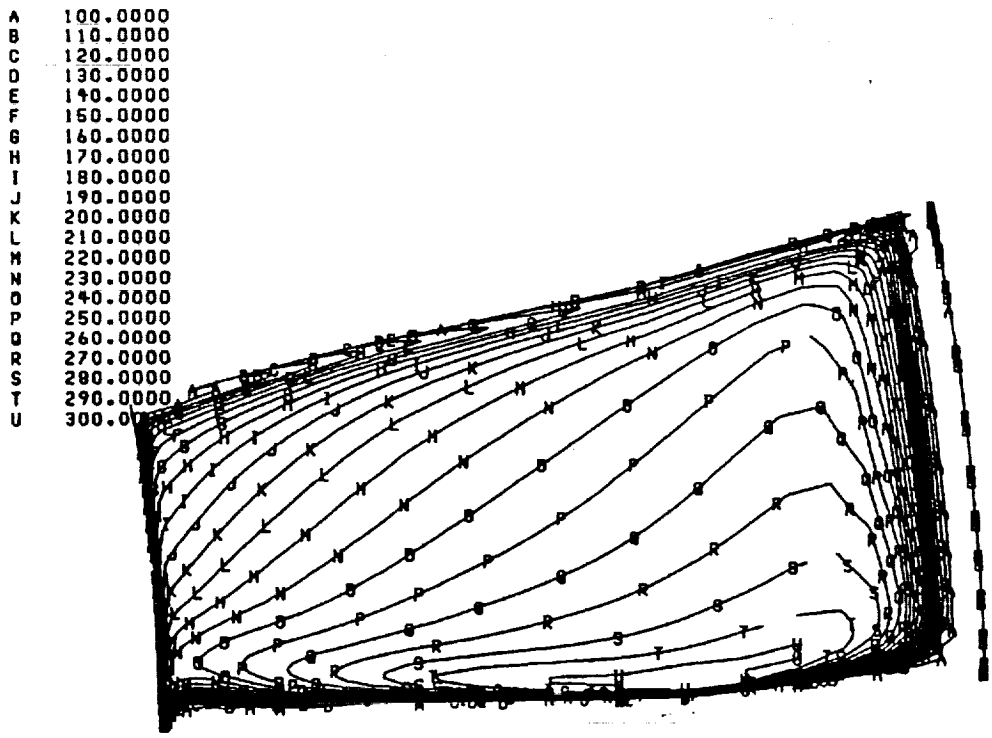
(f) Station 7.

Figure 13.—Continued.



Baseline

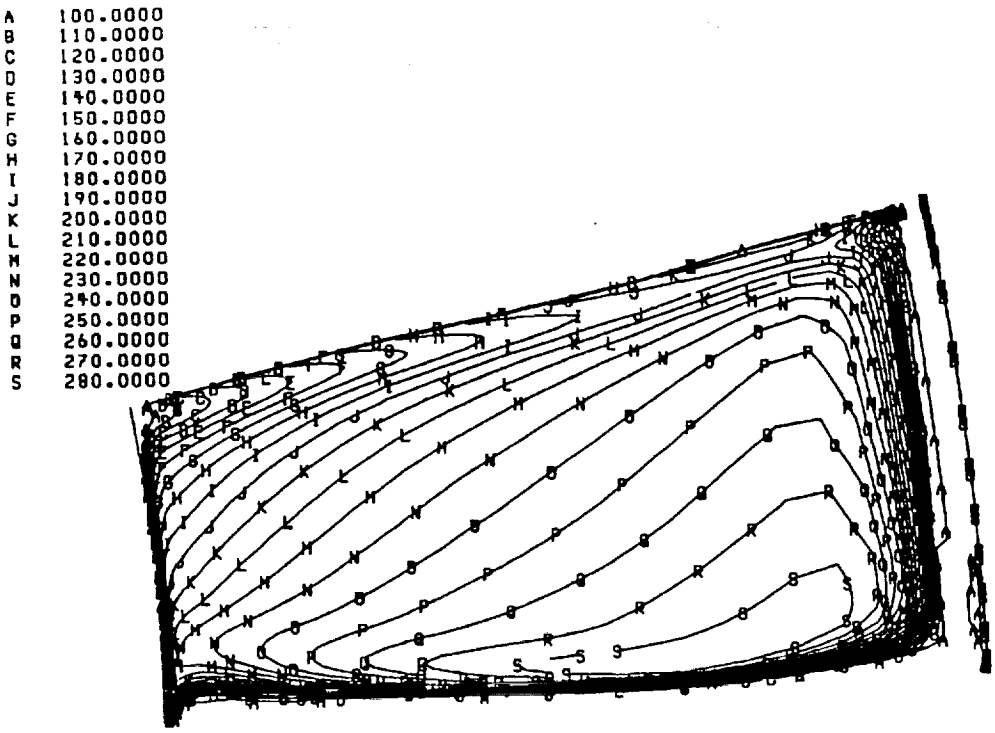
(g) Station 8.



Enhanced

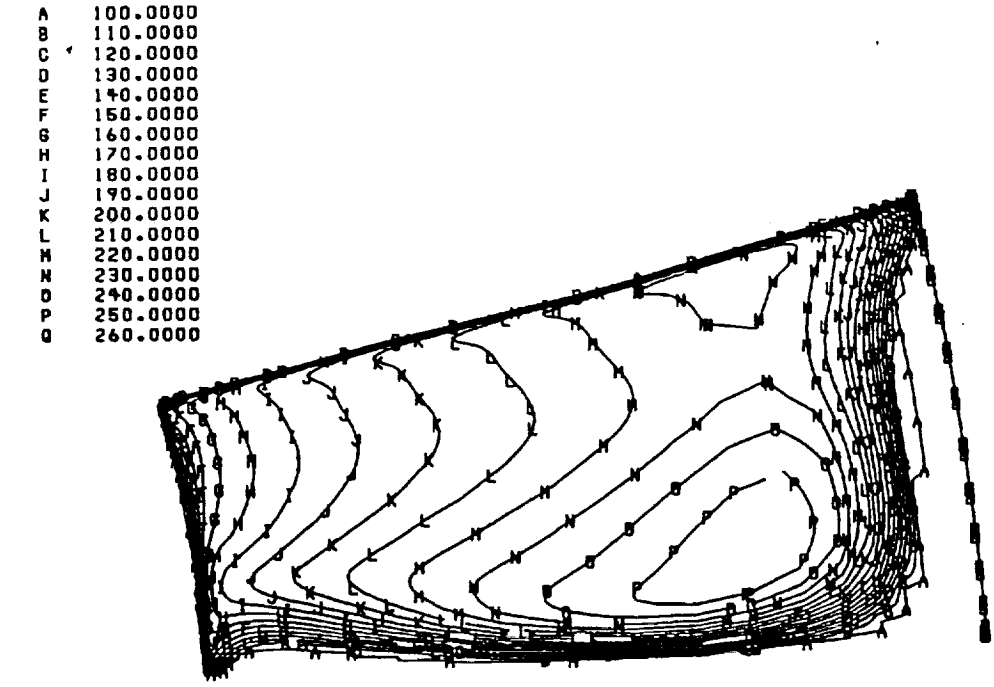
(h) Station 1.

Figure 13.—Continued.



Enhanced

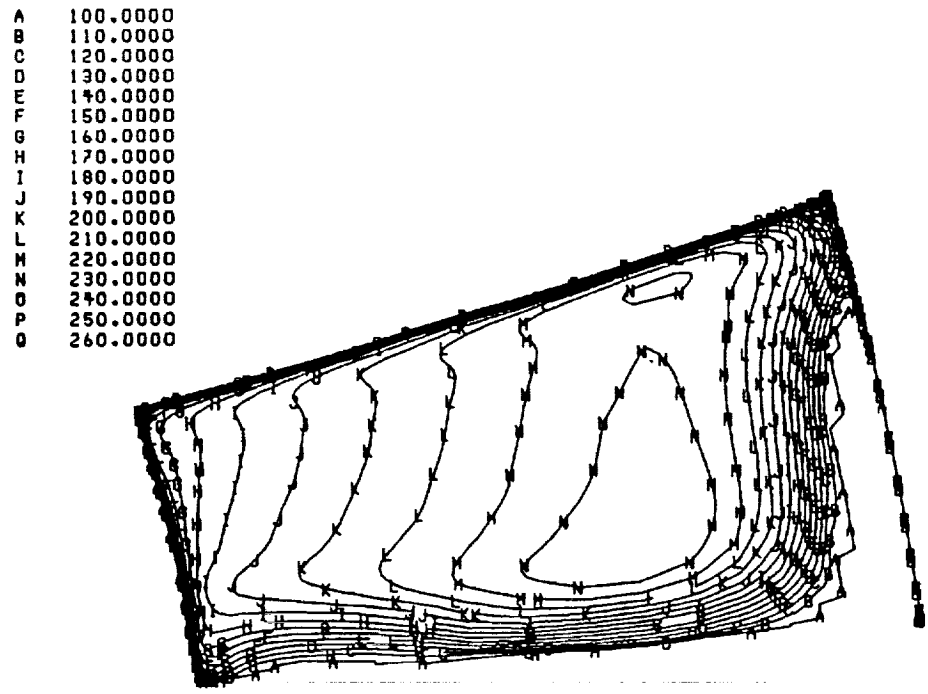
(i) Station 3.



Enhanced

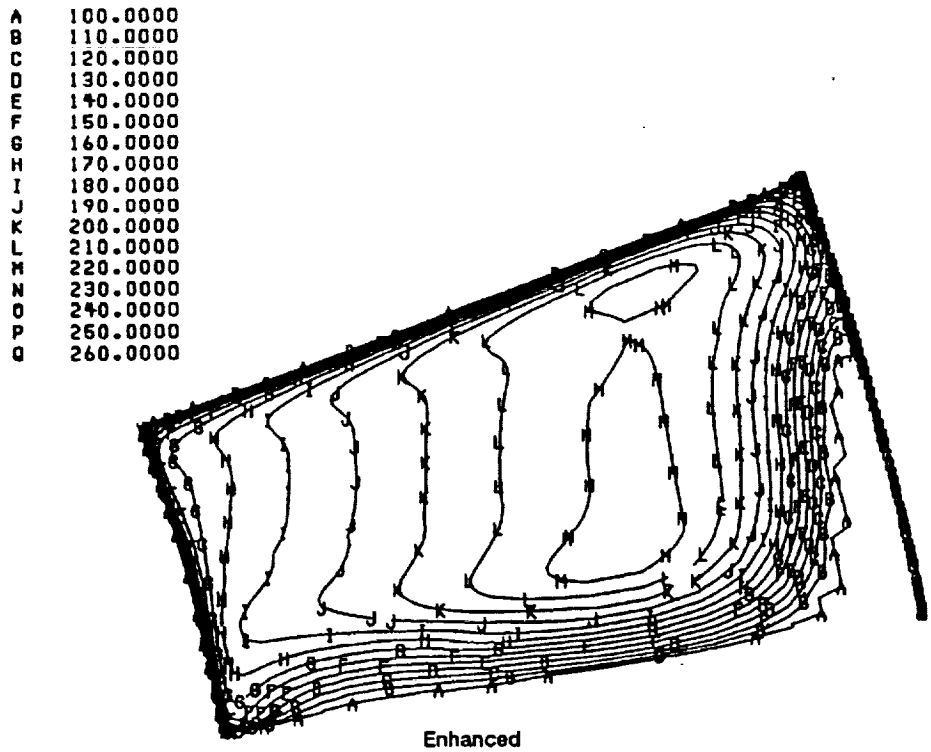
(j) Station 4.

Figure 13—Continued



Enhanced

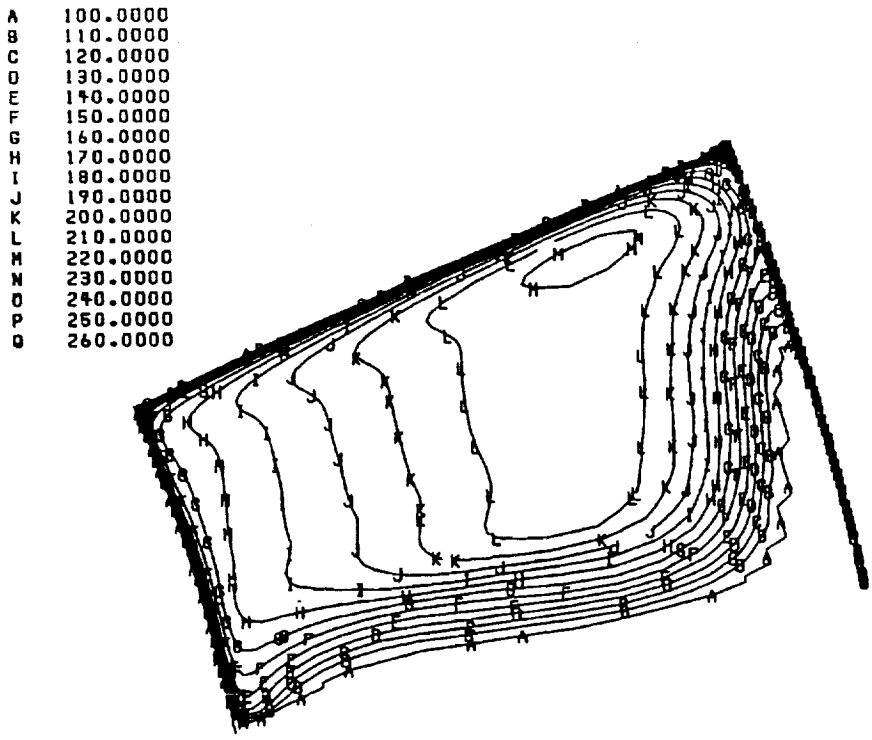
(k) Station 5.



Enhanced

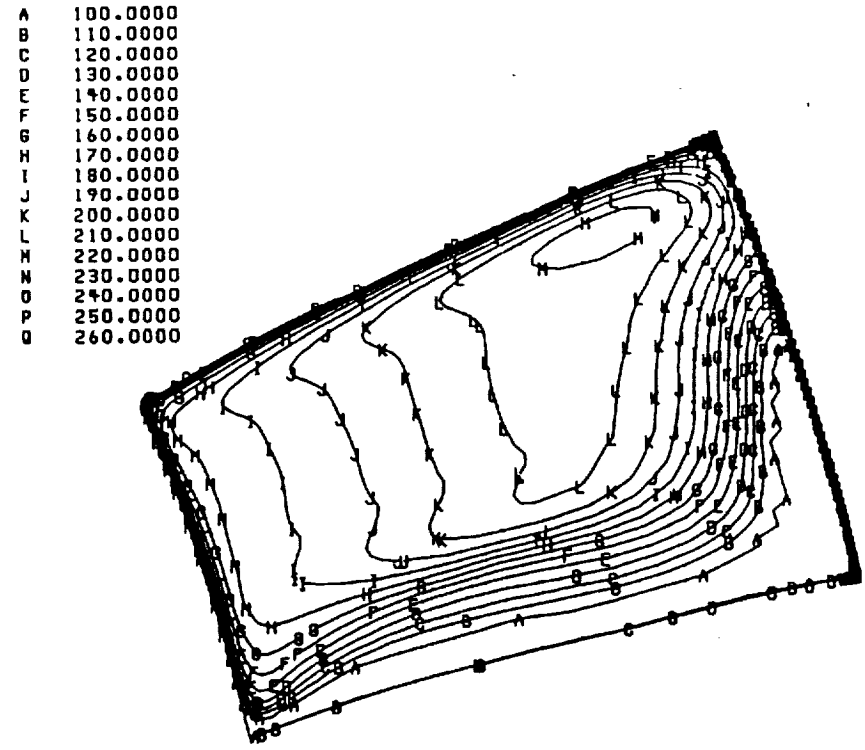
(l) Station 6.

Figure 13.—Continued.



Enhanced

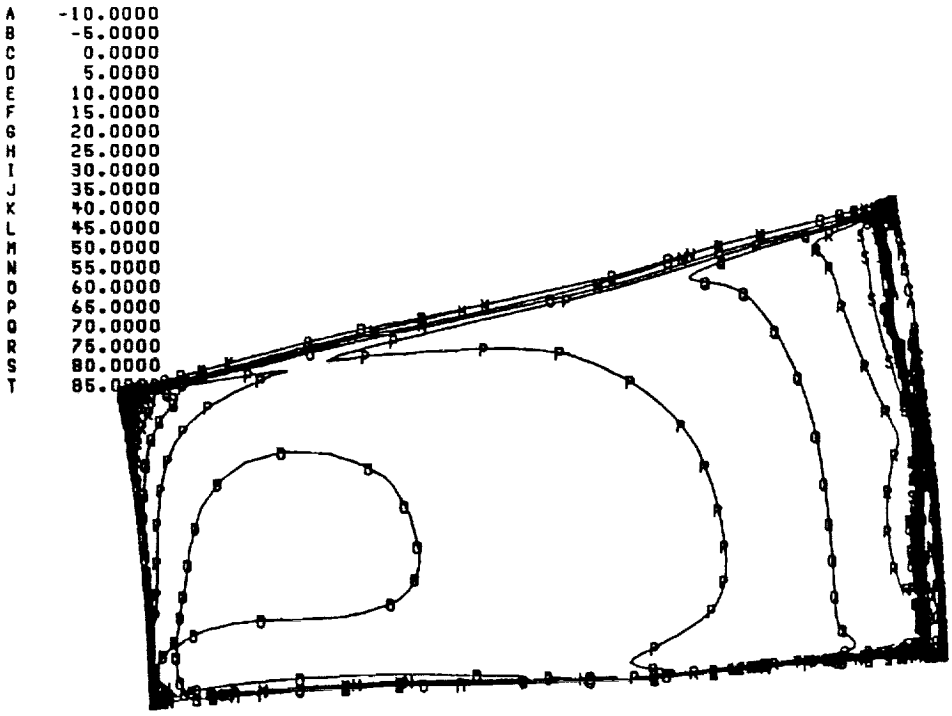
(m) Station 7.



Enhanced

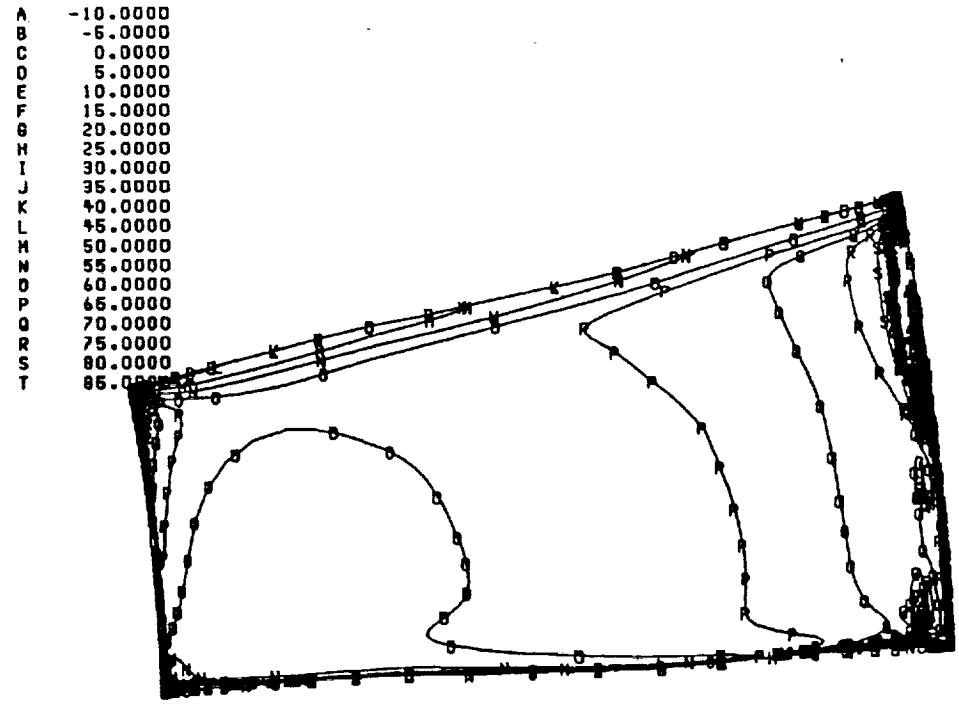
(n) Station 8.

Figure 13.—Concluded.



Baseline

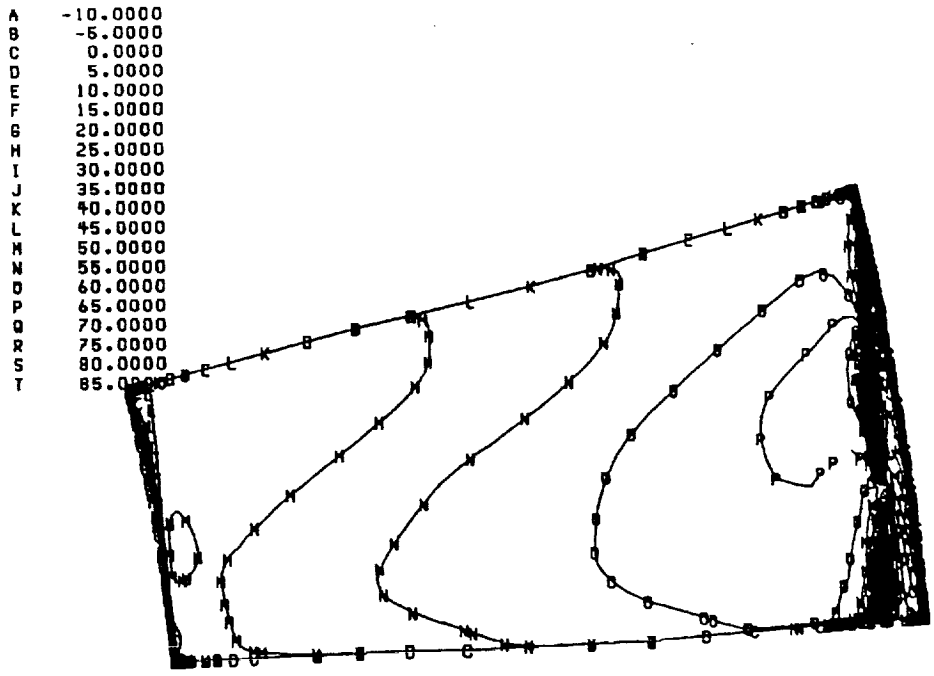
(a) Station 1.



Baseline

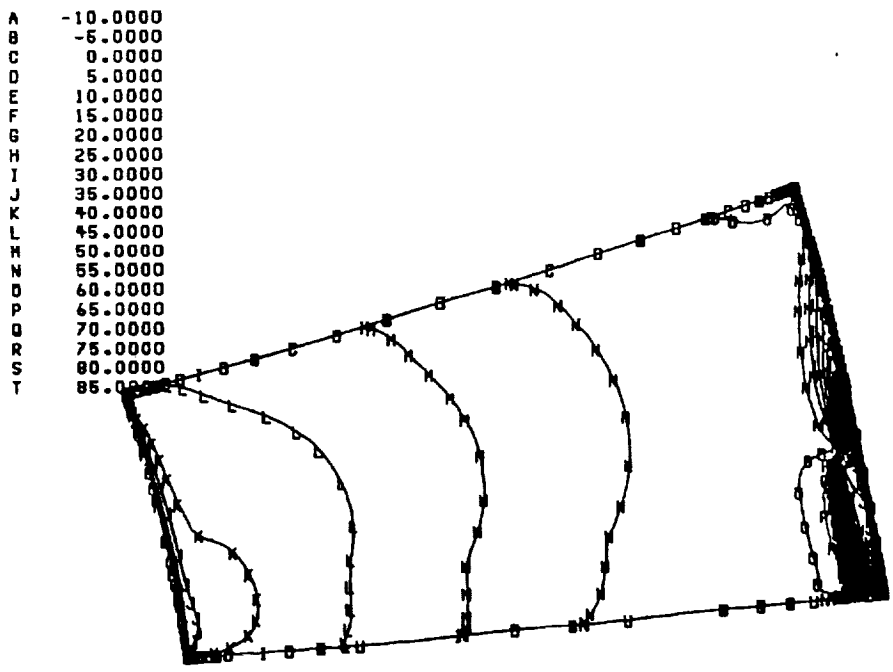
(b) Station 3.

Figure 14.—Predicted relaitve flow angles.



Baseline

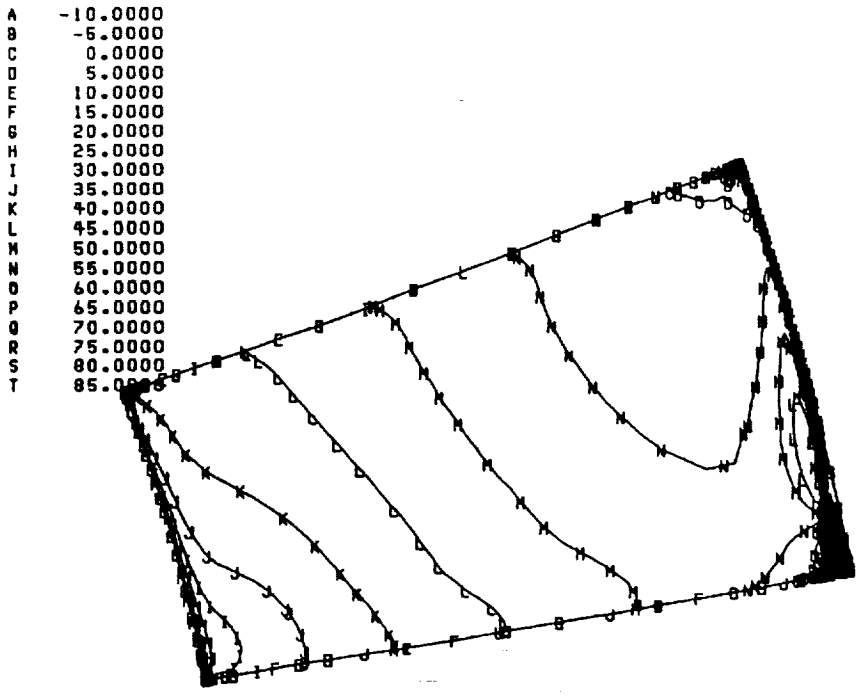
(c) Station 4.



Baseline

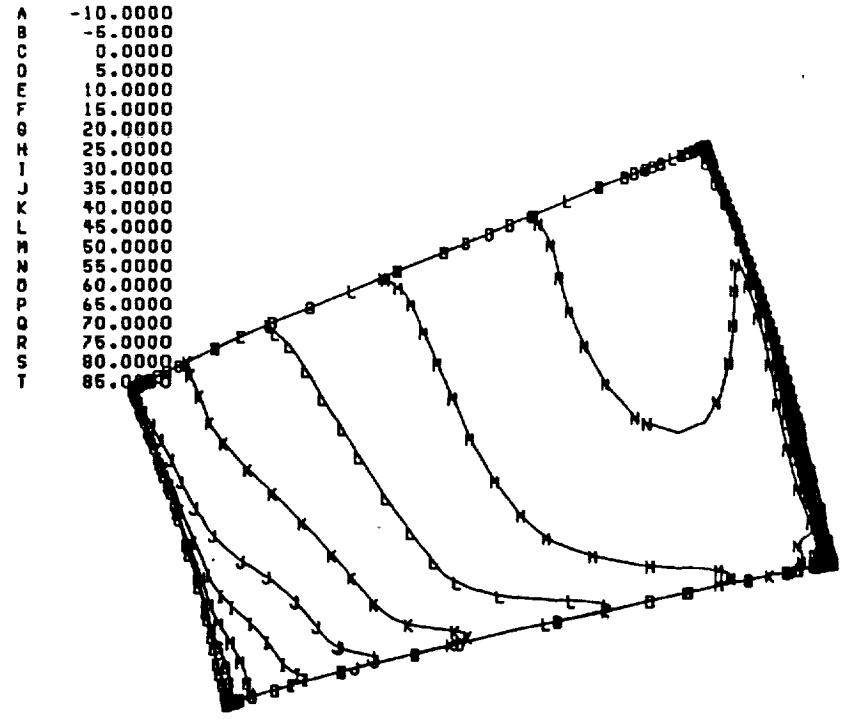
(d) Station 5.

Figure 14.—Continued.



Baseline

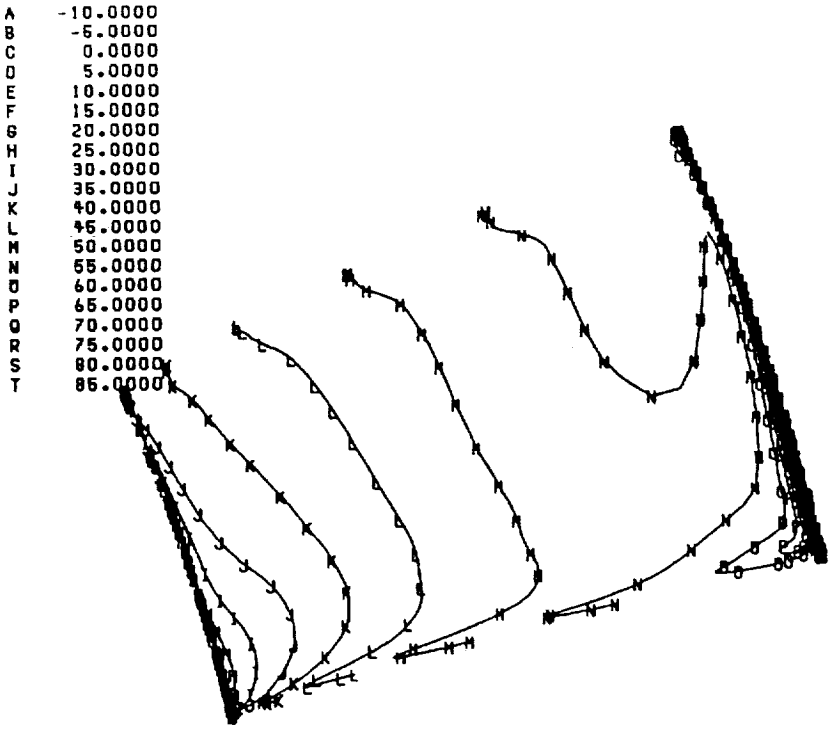
(e) Station 6.



Baseline

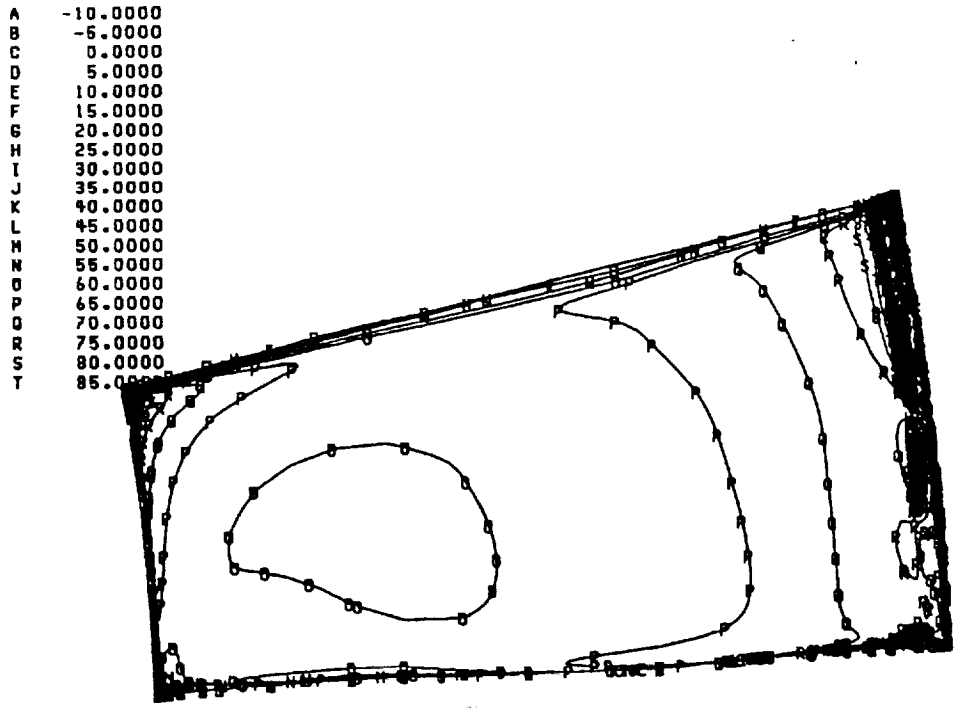
(f) Station 7.

Figure 14.—Continued.



Baseline

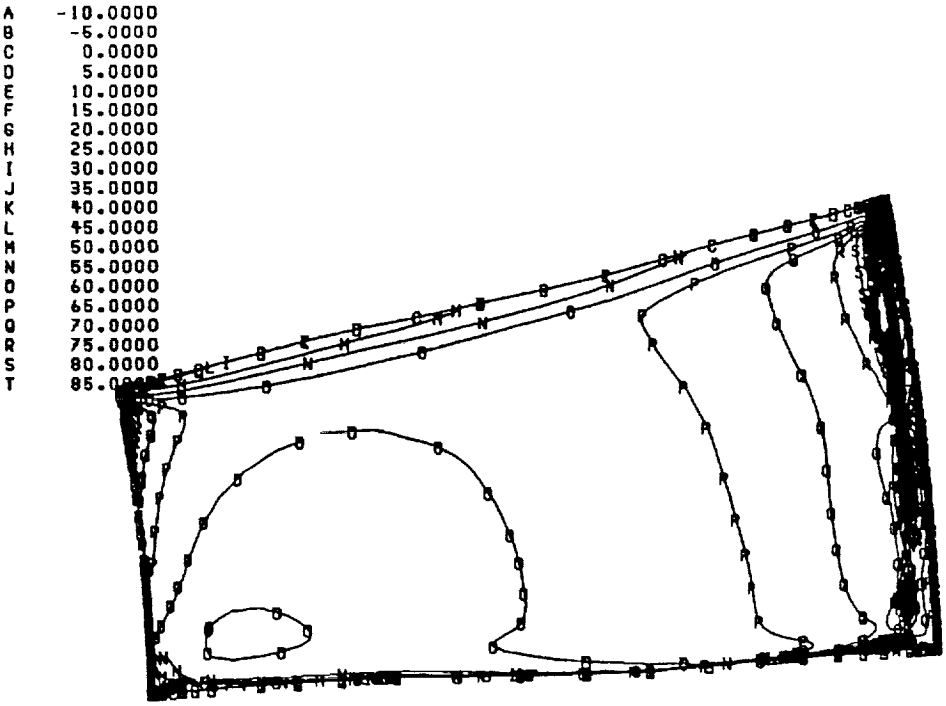
(g) Station 8.



Enhanced

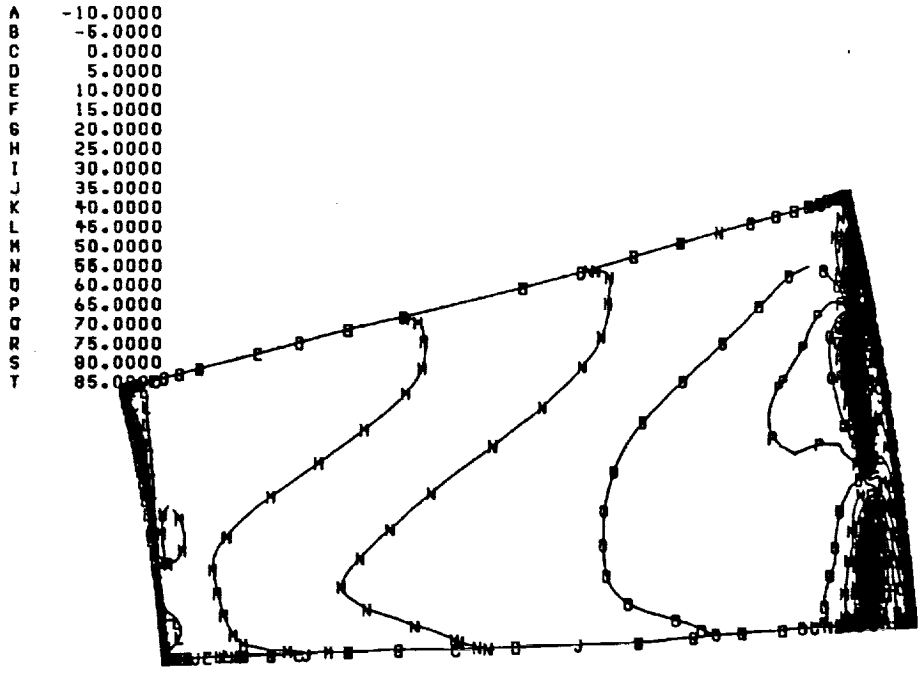
(h) Station 1.

Figure 14.—Continued.



Enhanced

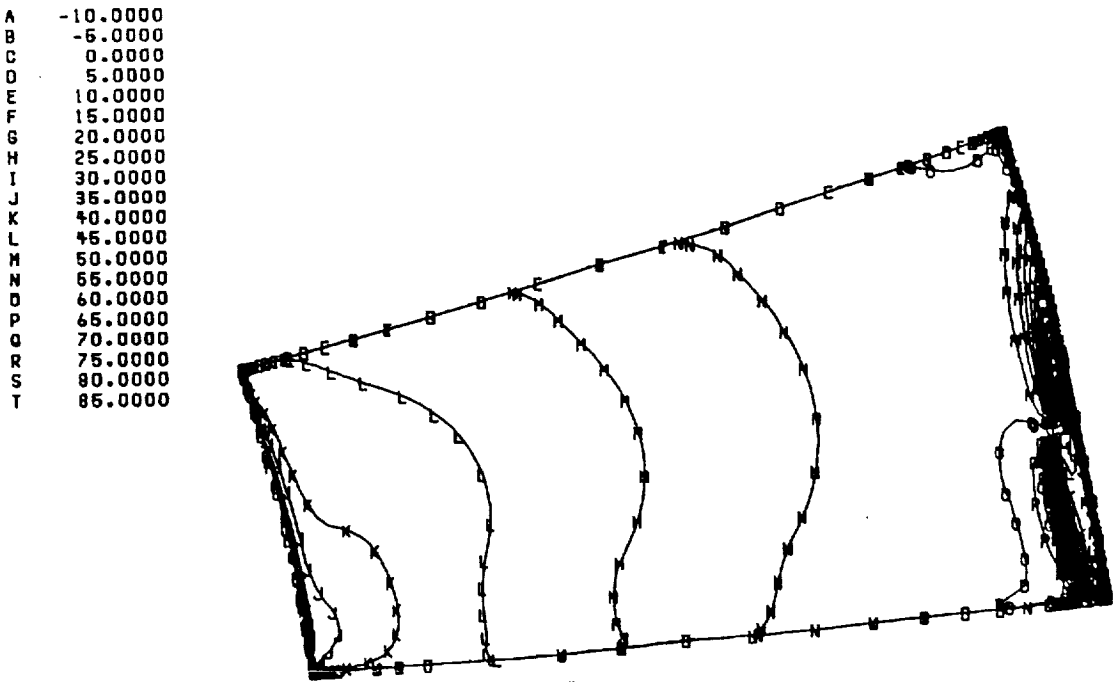
(i) Station 3.



Enhanced

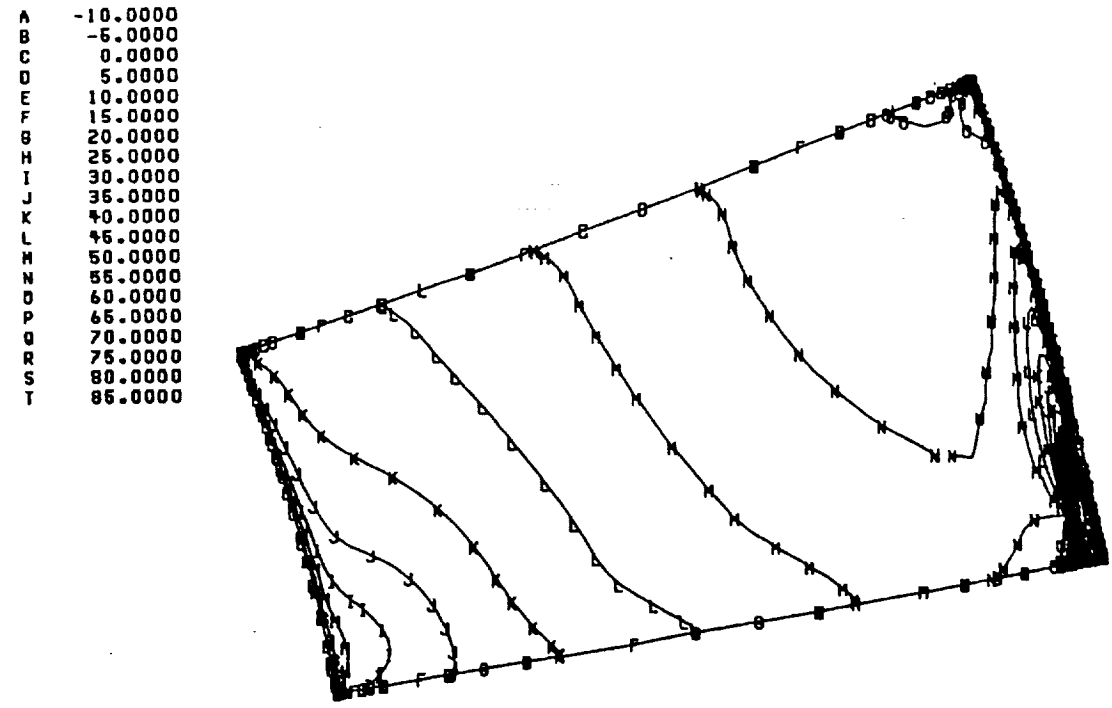
(j) Station 4.

Figure 14—Continued.



Enhanced

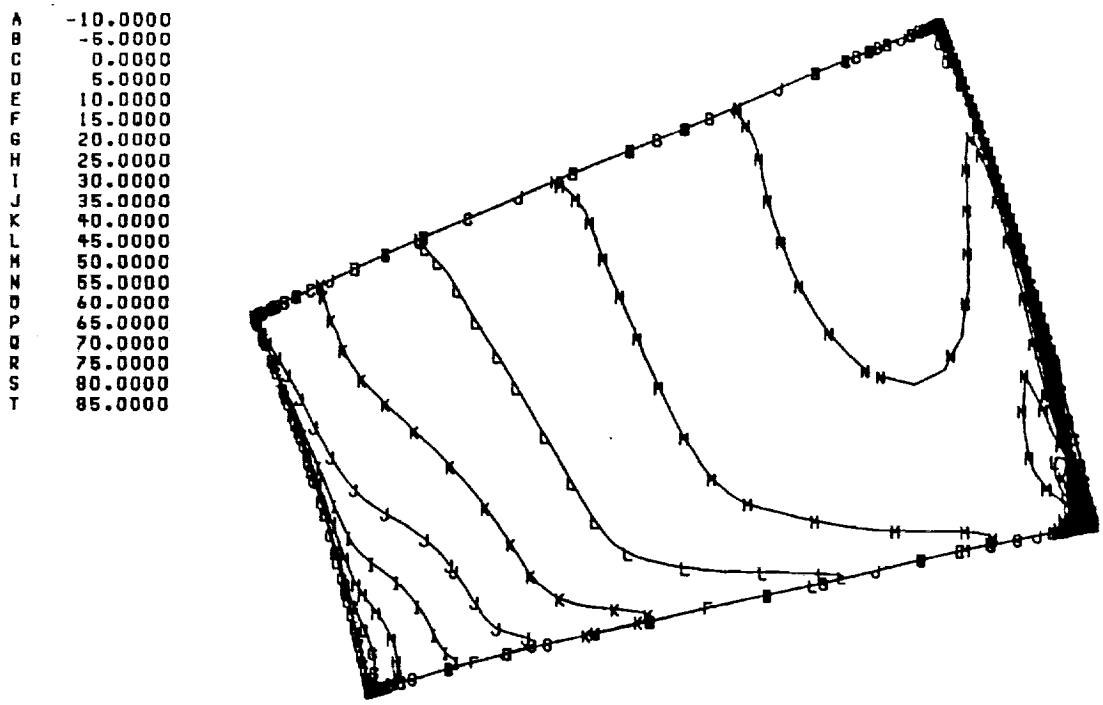
(k) Station 5.



Enhanced

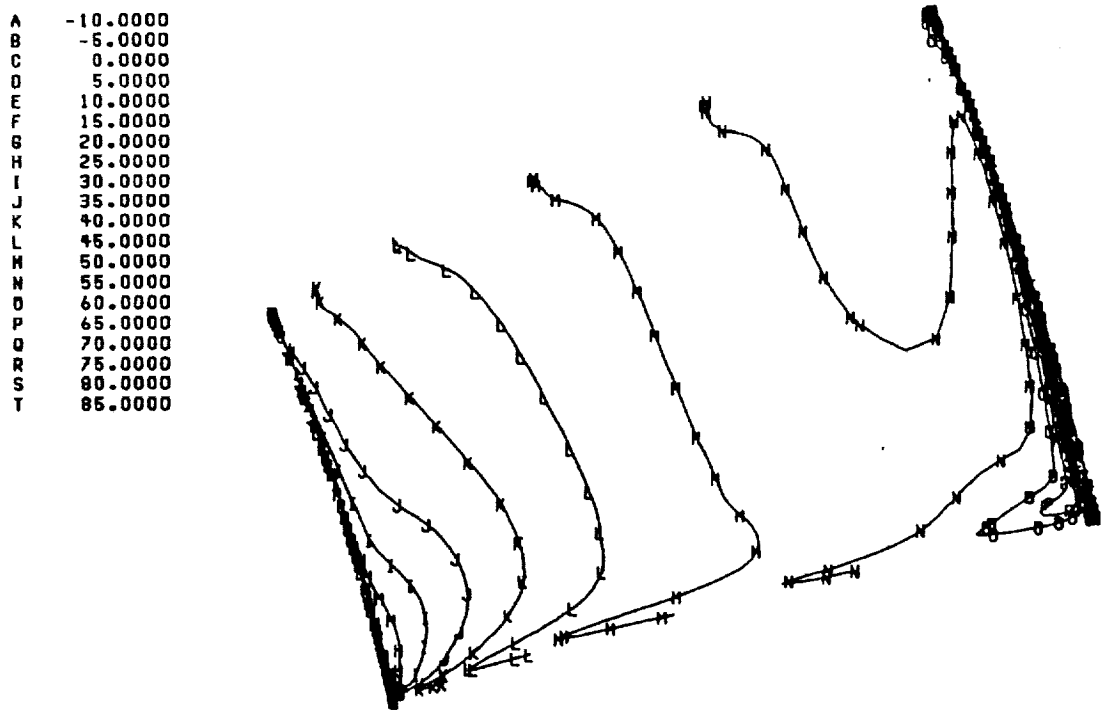
(l) Station 6.

Figure 14.—Continued.



Enhanced

(m) Station 7.



Enhanced

(n) Station 8.

Figure 14.—Concluded.

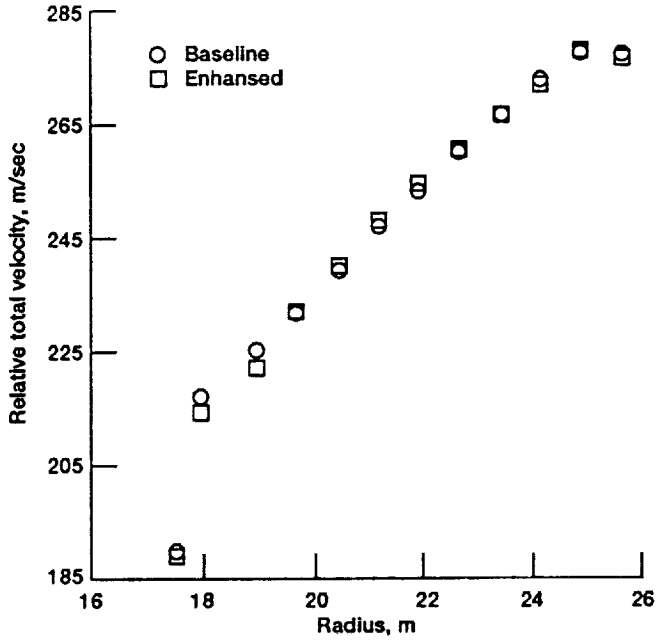


Figure 15.—Aerosurvey measured relative total velocities.

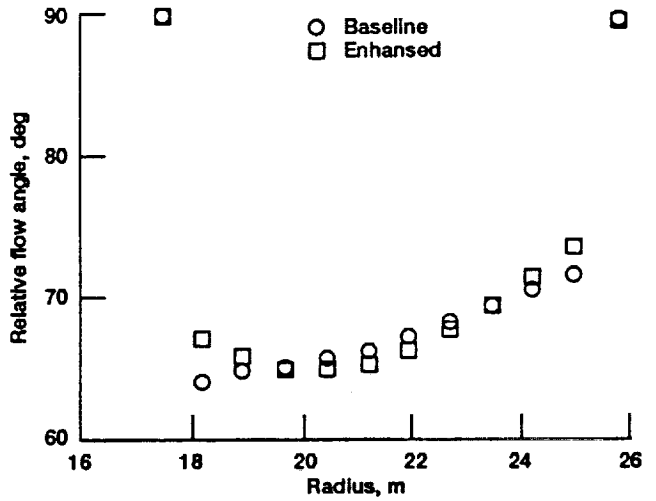


Figure 16.—Aerosurvey measured relative flow angle.

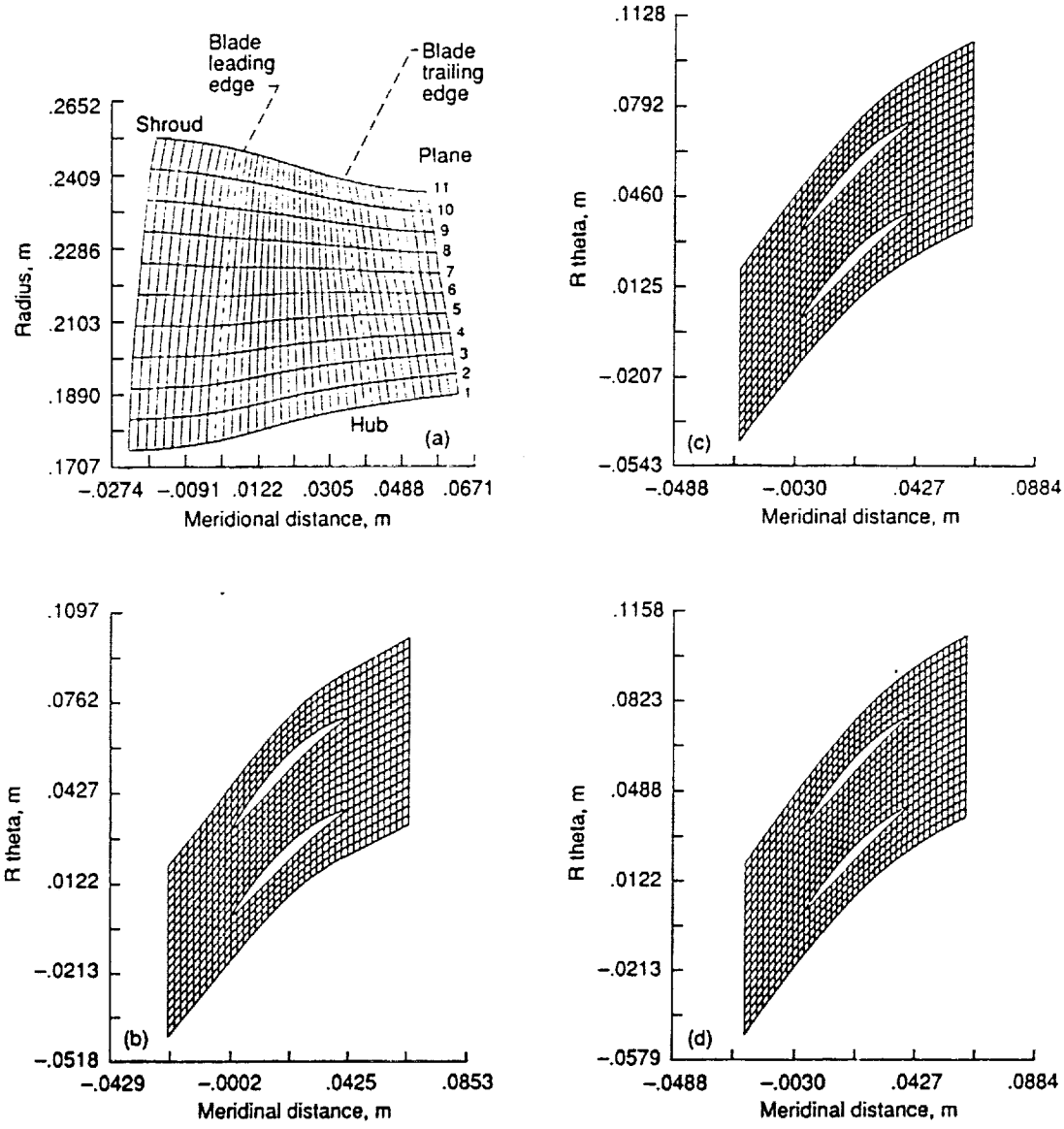


Figure 17.—Calculation grid for experimental data.

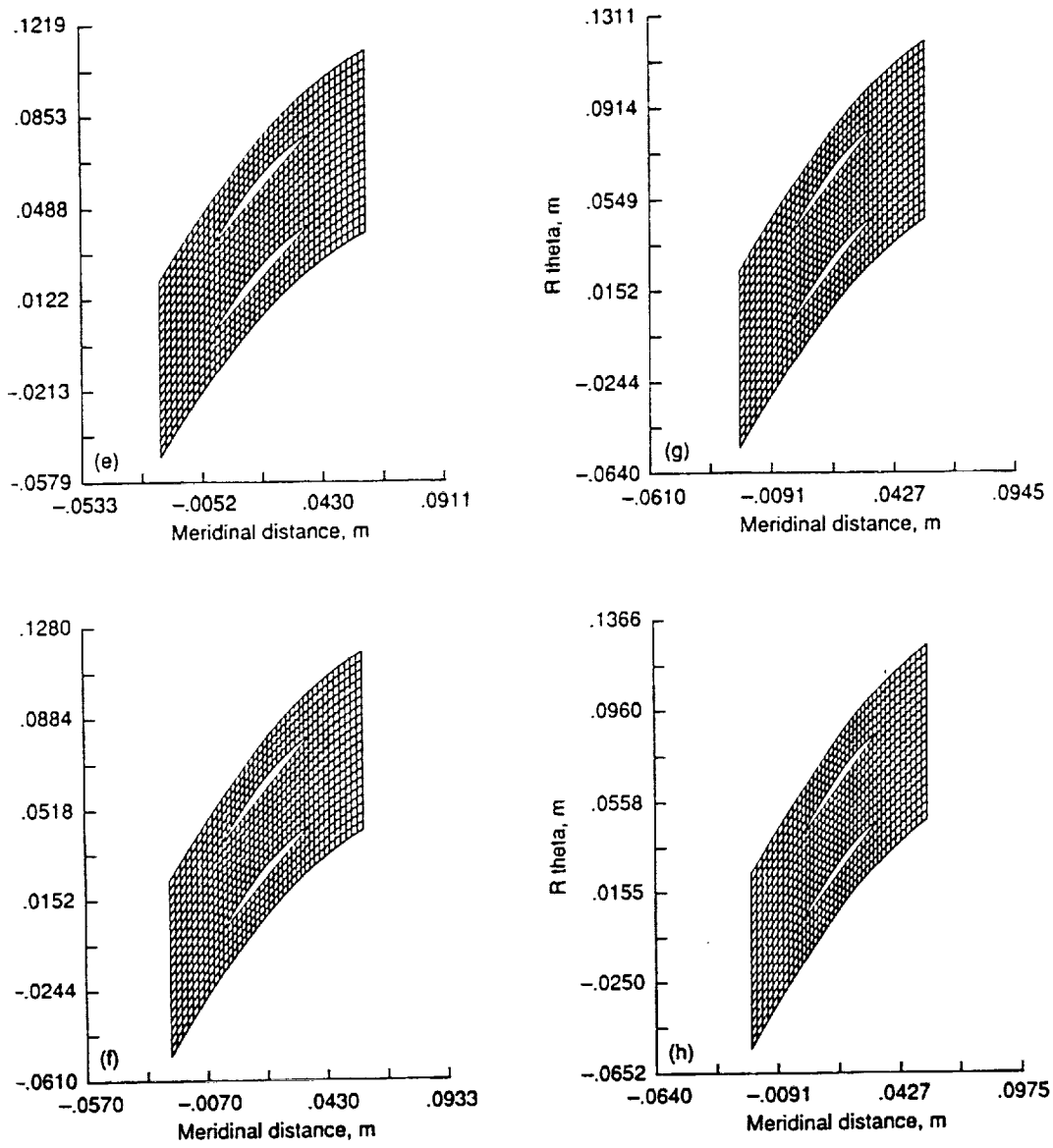


Figure 17.—Continued.

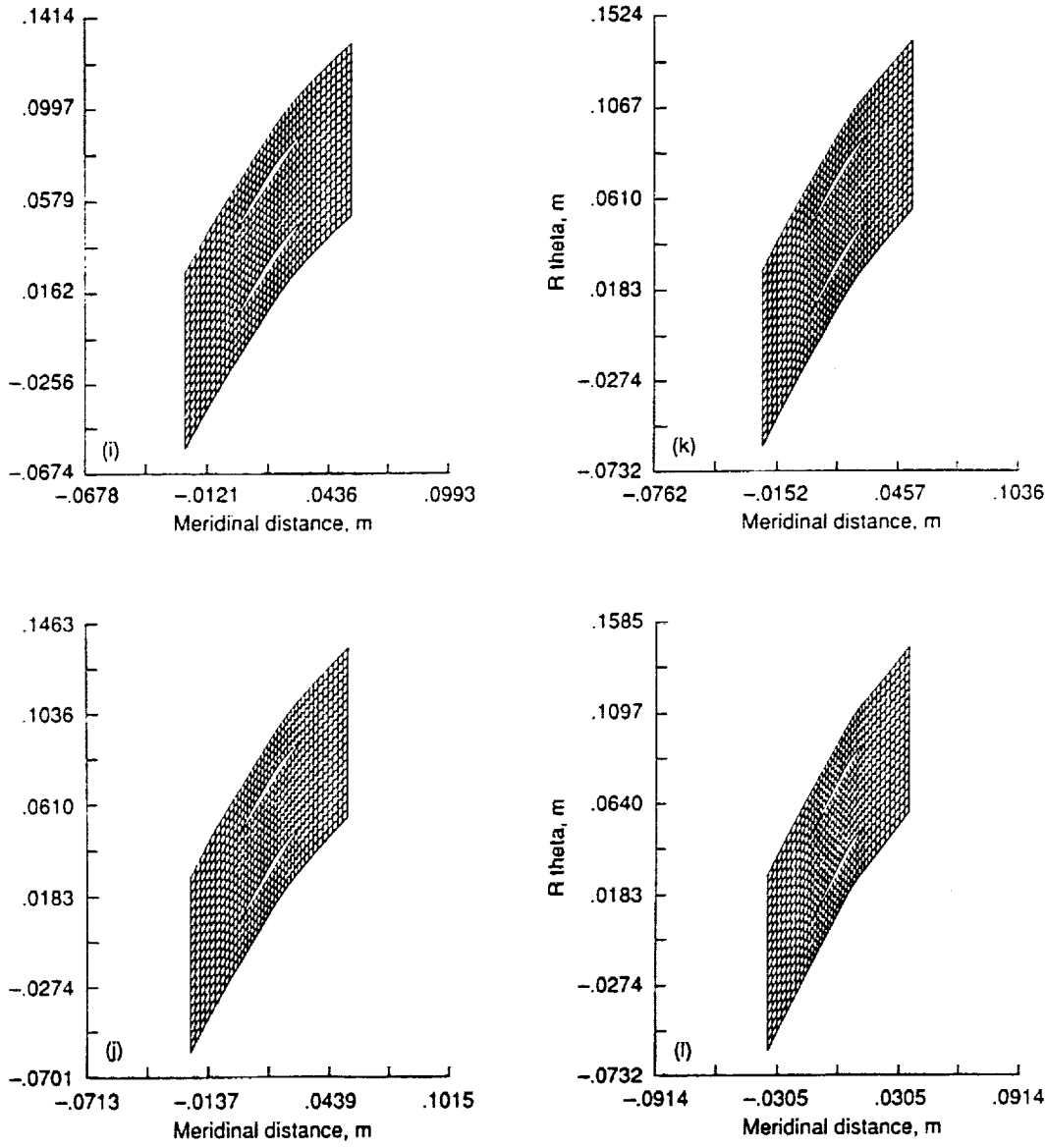


Figure 17.—Concluded.

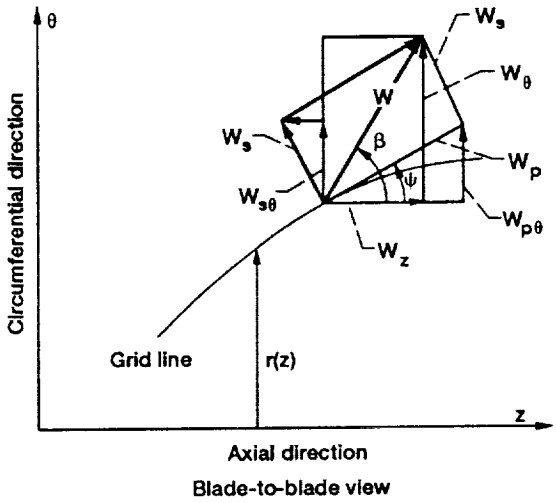
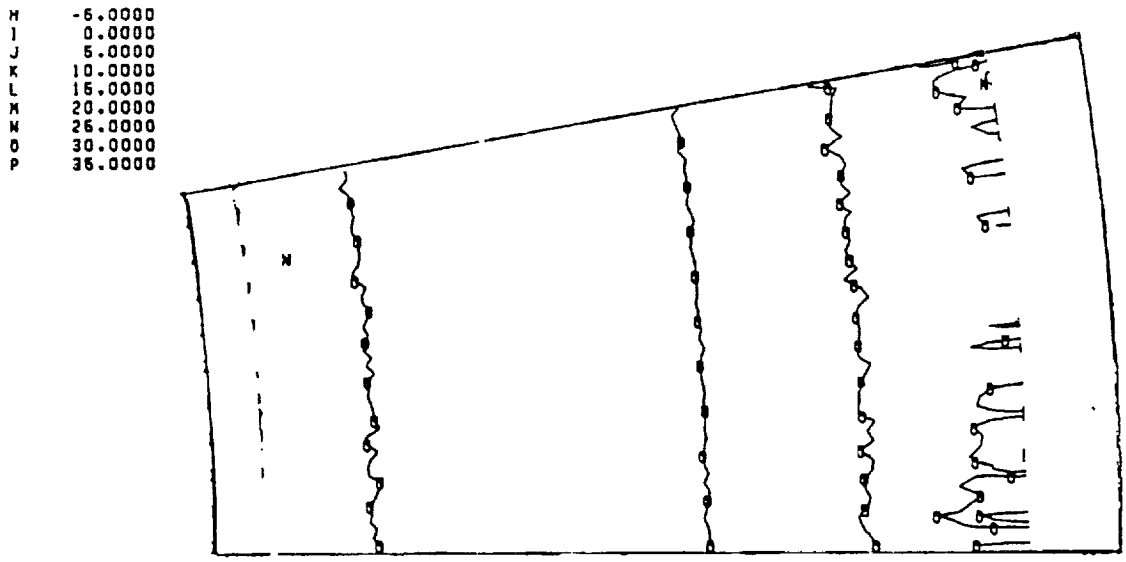
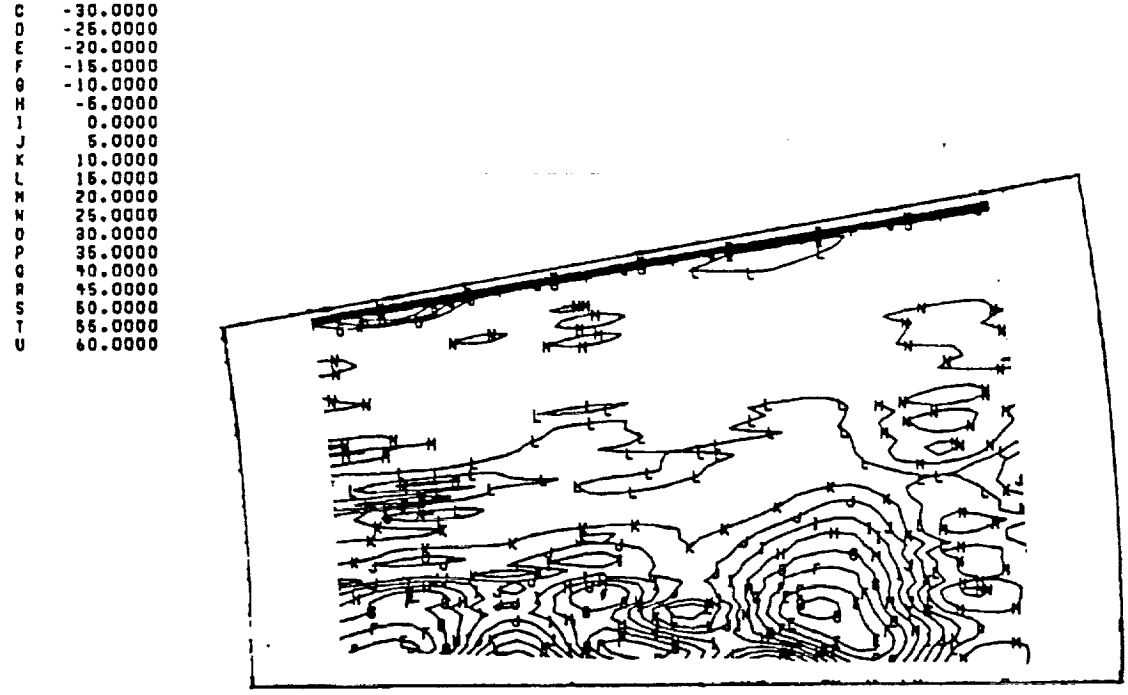


Figure 18.—Flow deviation calculation nomenclature.



Baseline

(a) Station 1.

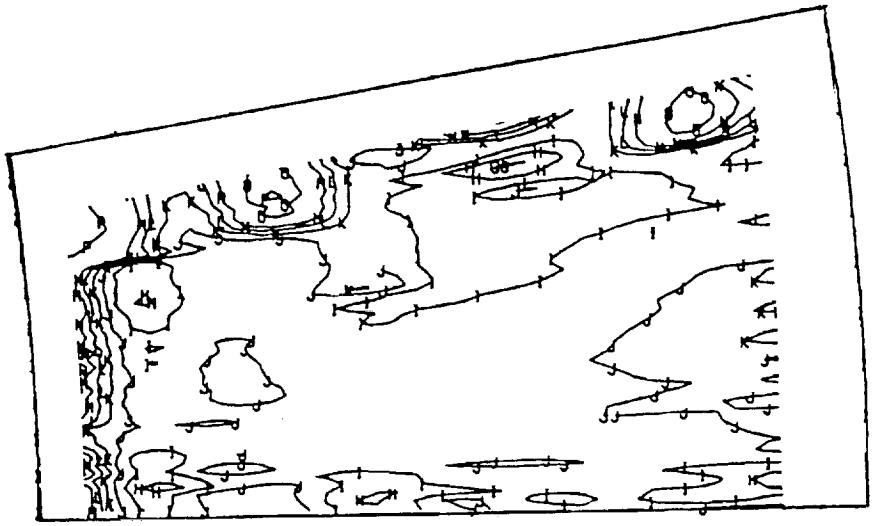


Baseline

(b) Station 3.

Figure 19.—Experimental deviation velocities.

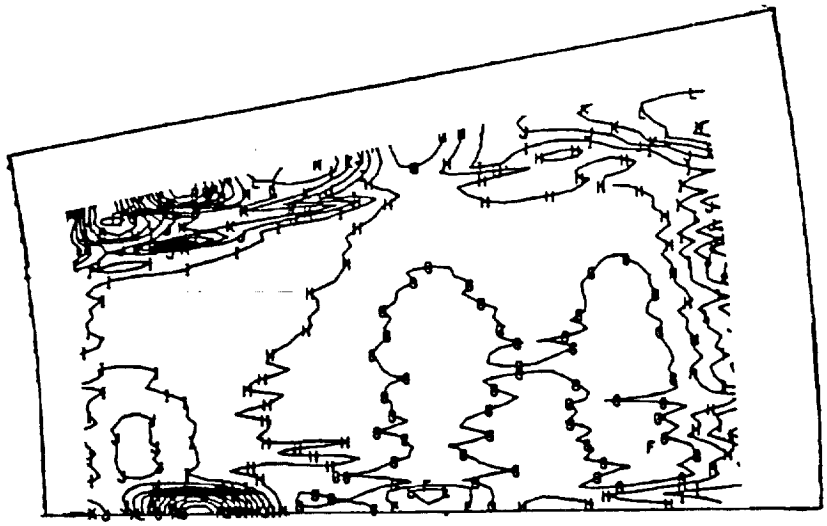
C -30.0000
D -25.0000
E -20.0000
F -15.0000
G -10.0000
H -5.0000
I 0.0000
J 5.0000
K 10.0000
L 15.0000
M 20.0000
N 25.0000
O 30.0000
P 35.0000
Q 40.0000
R 45.0000
S 50.0000
T 55.0000
U 60.0000



Baseline

(c) Station 4.

D -25.0000
E -20.0000
F -15.0000
G -10.0000
H -5.0000
I 0.0000
J 5.0000
K 10.0000
L 15.0000
M 20.0000
N 25.0000
O 30.0000
P 35.0000
Q 40.0000
R 45.0000
S 50.0000
T 55.0000
U 60.0000

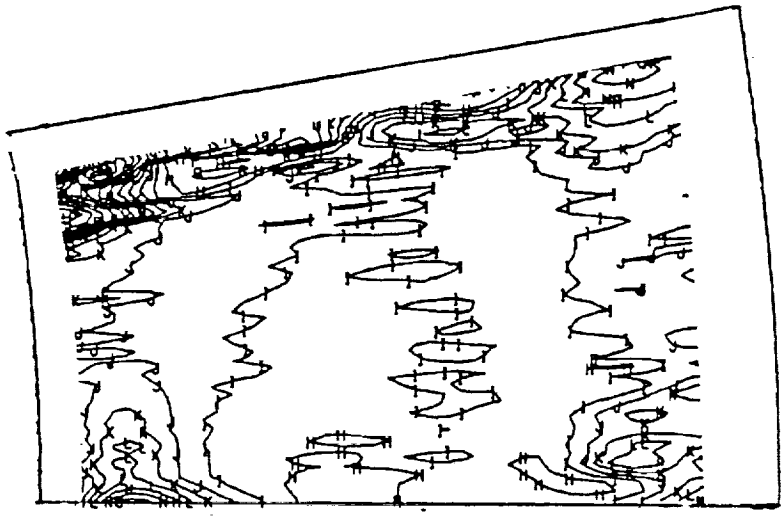


Baseline

(d) Station 5.

Figure 19.—Continued.

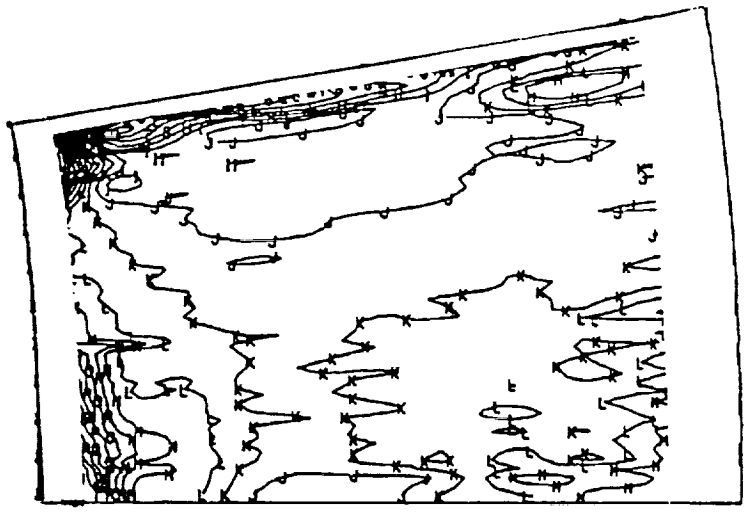
B	-35.0000
C	-30.0000
D	-25.0000
E	-20.0000
F	-15.0000
G	-10.0000
H	-5.0000
I	0.0000
J	5.0000
K	10.0000
L	15.0000
M	20.0000
N	25.0000
O	30.0000
P	35.0000
Q	40.0000
R	45.0000
S	50.0000
T	55.0000
U	60.0000



Baseline

(e) Station 6.

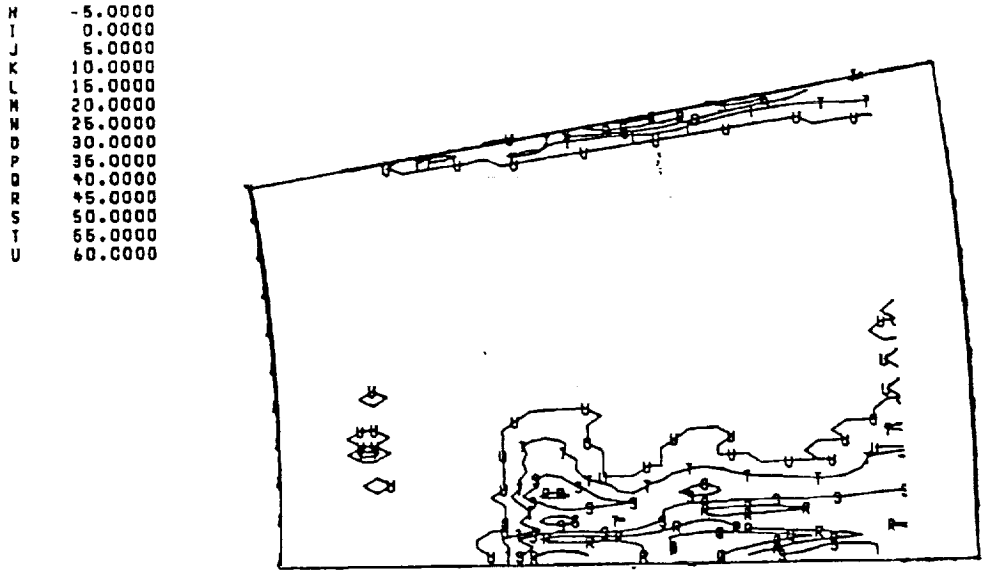
C	-30.0000
D	-25.0000
E	-20.0000
F	-15.0000
G	-10.0000
H	-5.0000
I	0.0000
J	5.0000
K	10.0000
L	15.0000
M	20.0000
N	25.0000
O	30.0000
P	35.0000
Q	40.0000
R	45.0000
S	50.0000
T	55.0000
U	60.0000



Baseline

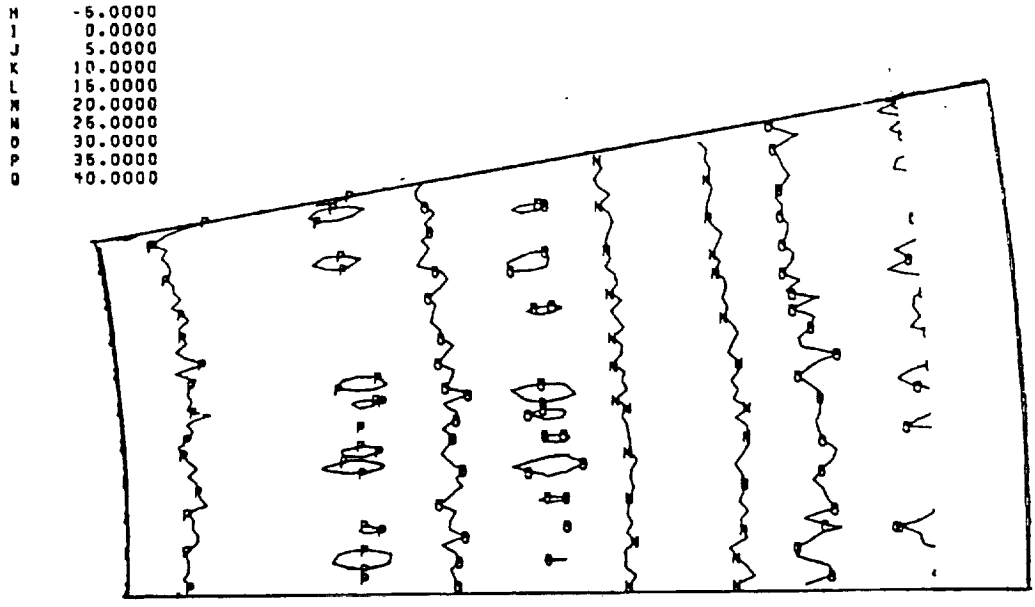
(f) Station 7.

Figure 19.—Continued.



Baseline

(g) Station 8.

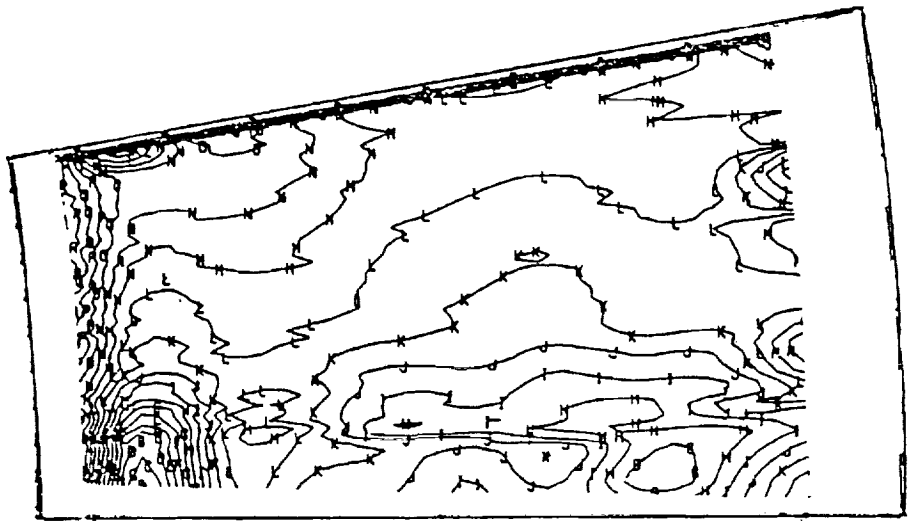


Enhanced

(h) Station 1.

Figure 19.—Continued.

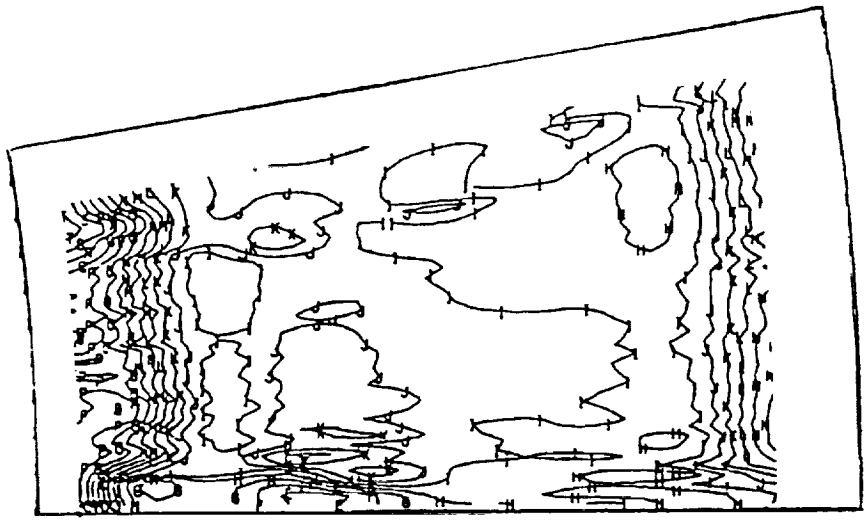
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G	-10.0000
H	-5.0000
I	0.0000
J	5.0000
K	10.0000
L	15.0000
M	20.0000
N	25.0000
O	30.0000
P	35.0000
Q	40.0000
R	45.0000
S	50.0000
T	55.0000
U	60.0000



Enhanced

(i) Station 3.

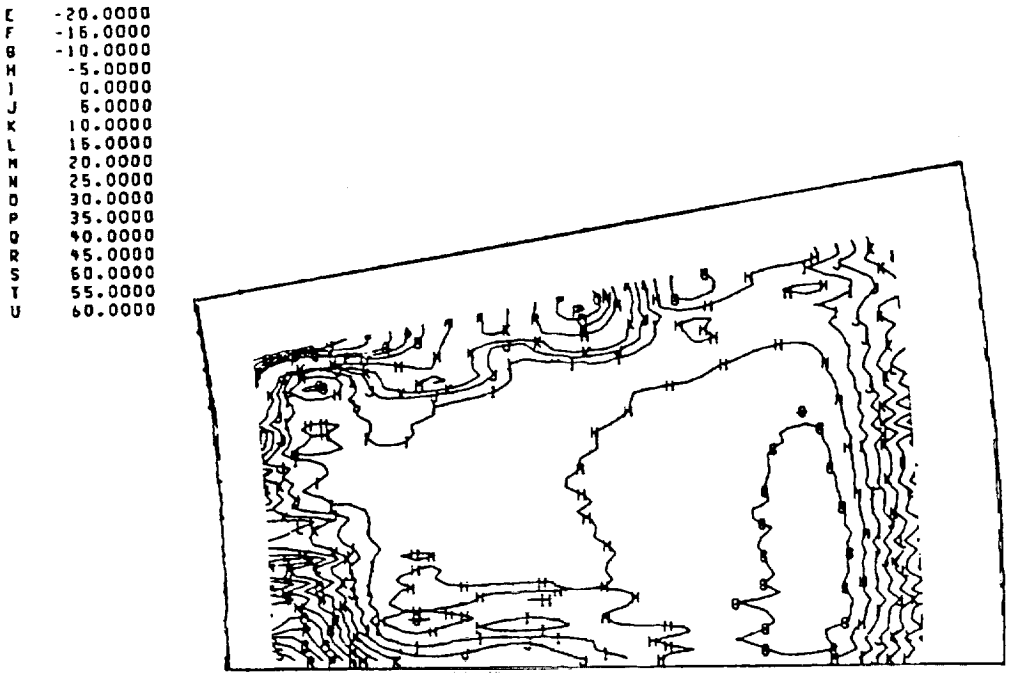
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E	-20.0000
F	-15.0000
G	-10.0000
H	-5.0000
I	0.0000
J	5.0000
K	10.0000
L	15.0000
M	20.0000
N	25.0000
O	30.0000
P	35.0000
Q	40.0000
R	45.0000
S	50.0000
T	55.0000
U	60.0000



Enhanced

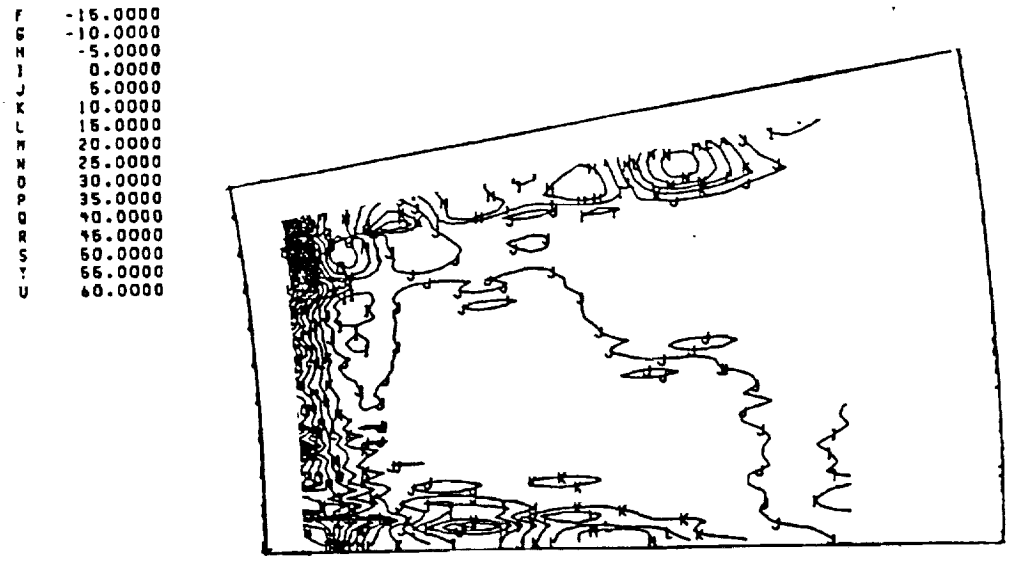
(j) Station 4.

Figure 19.—Continued.



Enhanced

(k) Station 5.

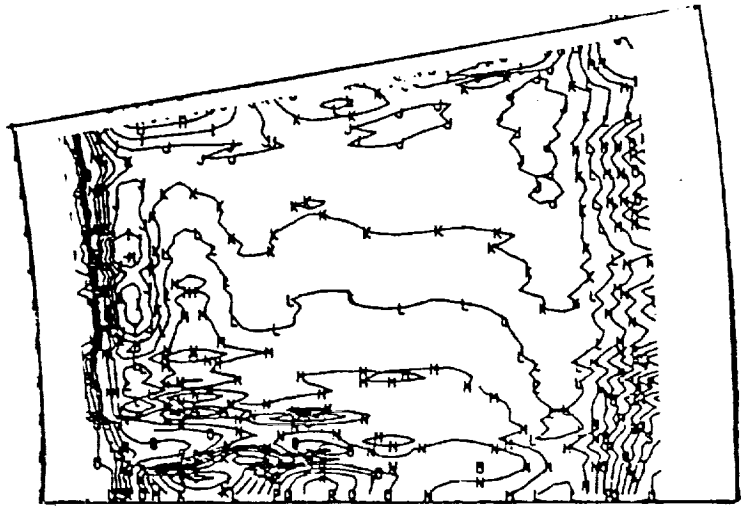


Enhanced

(l) Station 6.

Figure 19.—Continued.

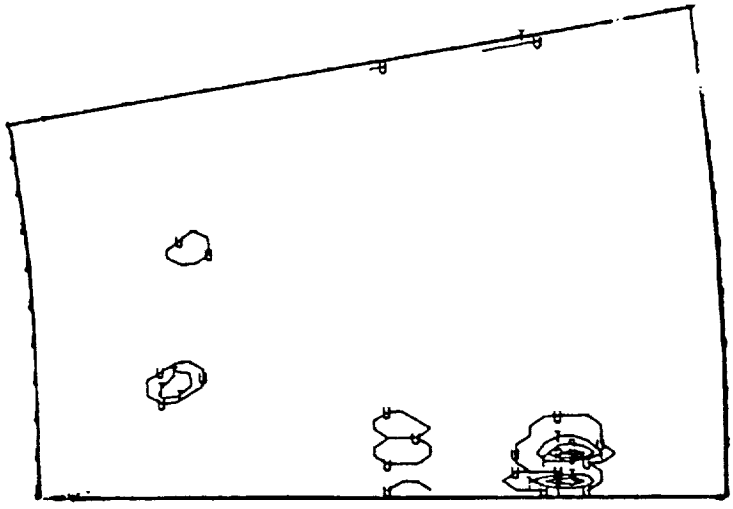
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G -10.0000
H -5.0000
I 0.0000
J 5.0000
K 10.0000
L 15.0000
M 20.0000
N 25.0000
O 30.0000
P 35.0000
Q 40.0000
R 45.0000
S 50.0000
T 55.0000
U 60.0000



Enhanced

(m) Station 7.

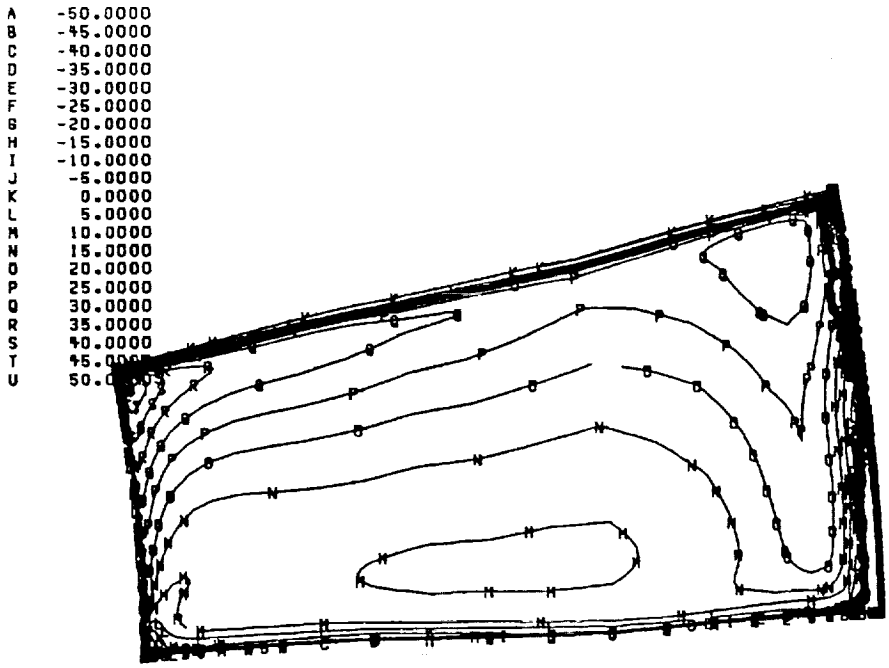
H -5.0000
I 0.0000
J 5.0000
K 10.0000
L 15.0000
M 20.0000
N 25.0000
O 30.0000
P 35.0000
Q 40.0000
R 45.0000
S 50.0000
T 55.0000
U 60.0000



Enhanced

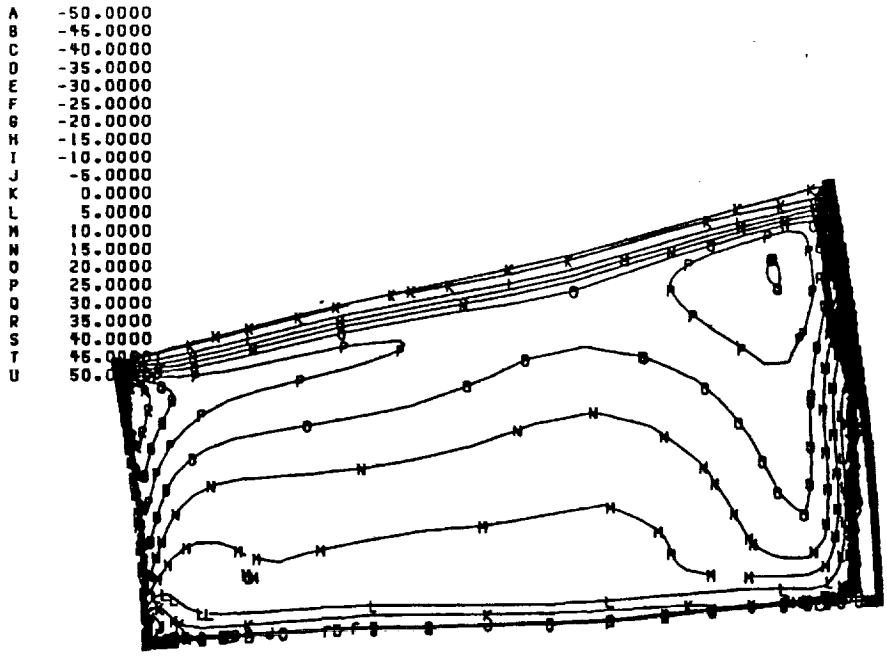
(n) Station 8.

Figure 19.—Concluded.



Baseline

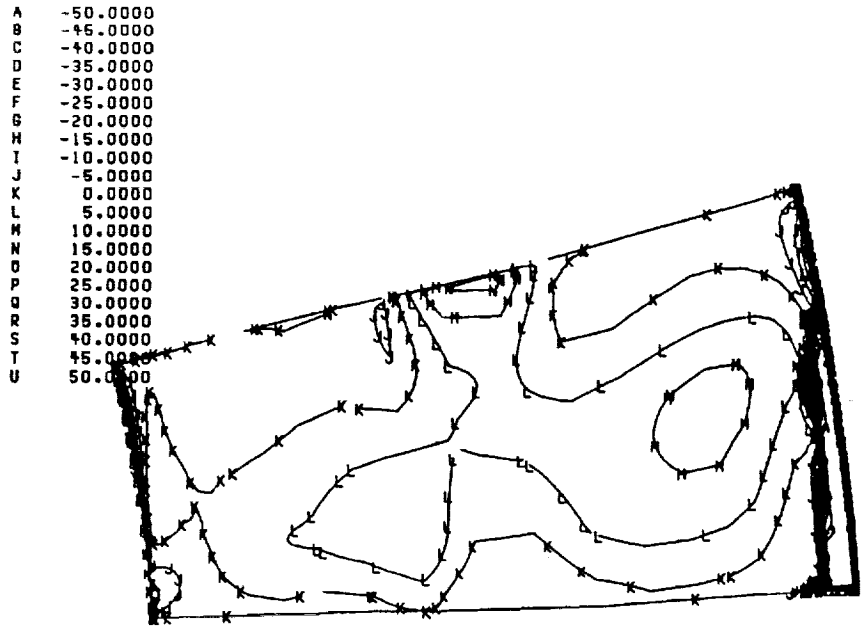
(a) Station 1.



Baseline

(b) Station 3.

Figure 20.—Predicted deviation velocities.



Baseline

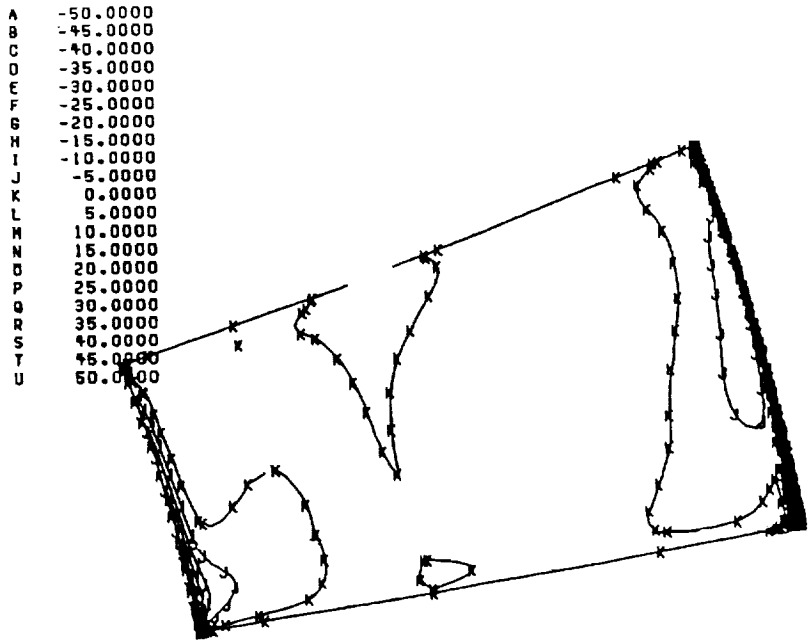
(c) Station 4.



Baseline

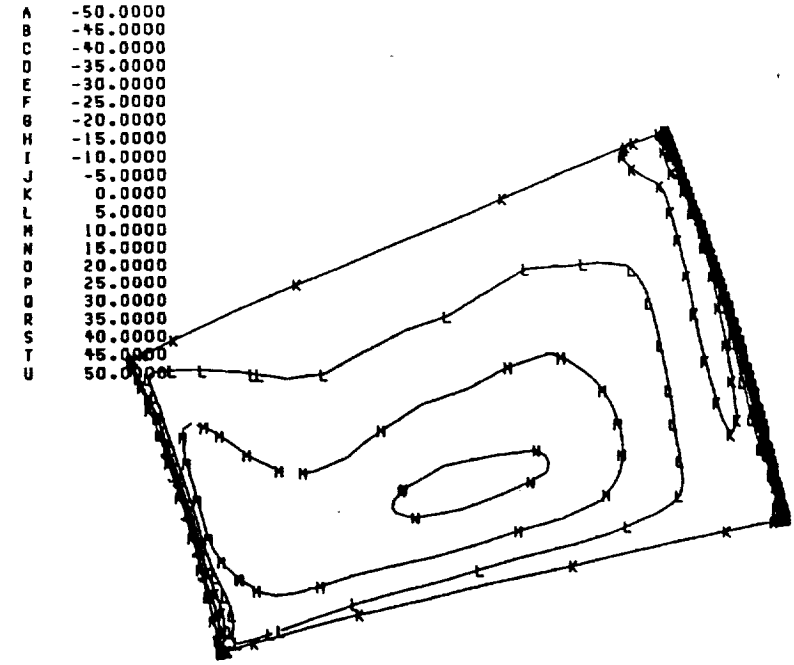
(d) Station 5.

Figure 20.—Continued.



Baseline

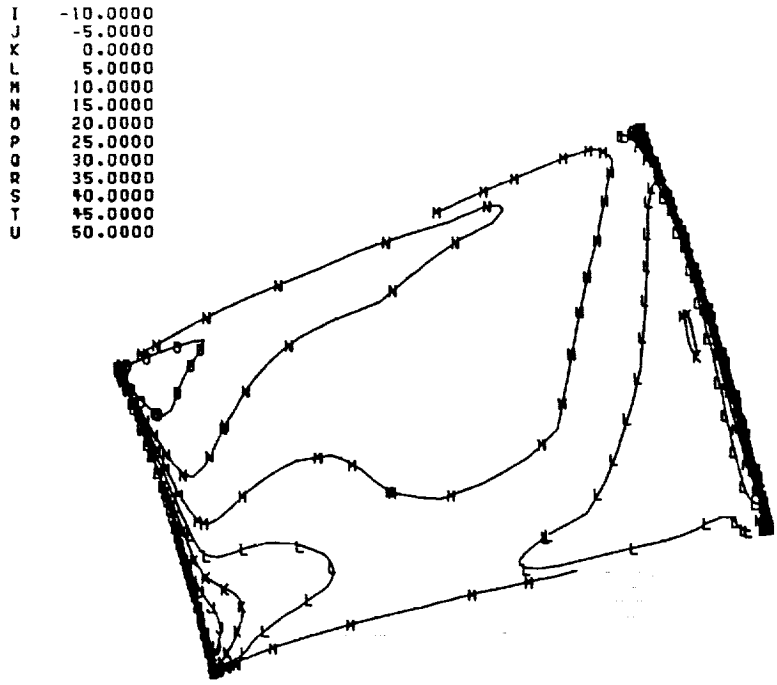
(e) Station 6.



Baseline

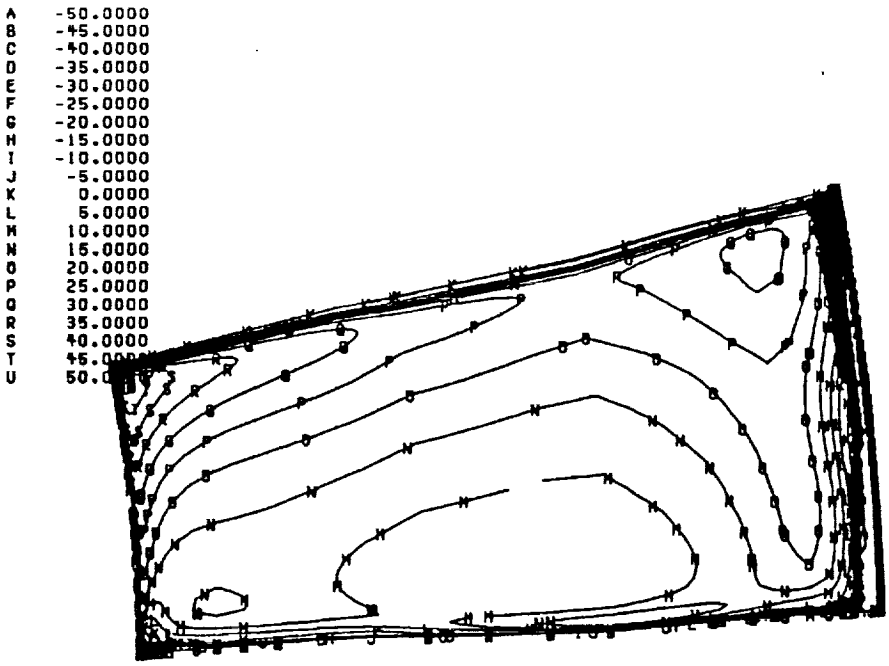
(f) Station 7.

Figure 20.—Continued.



Baseline

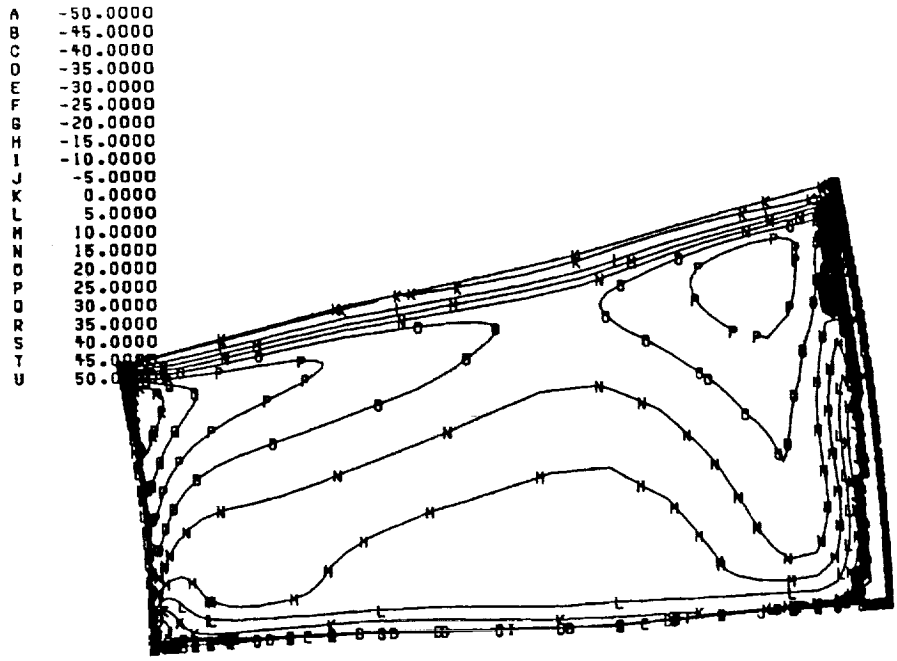
(g) Station 8.



Enhanced

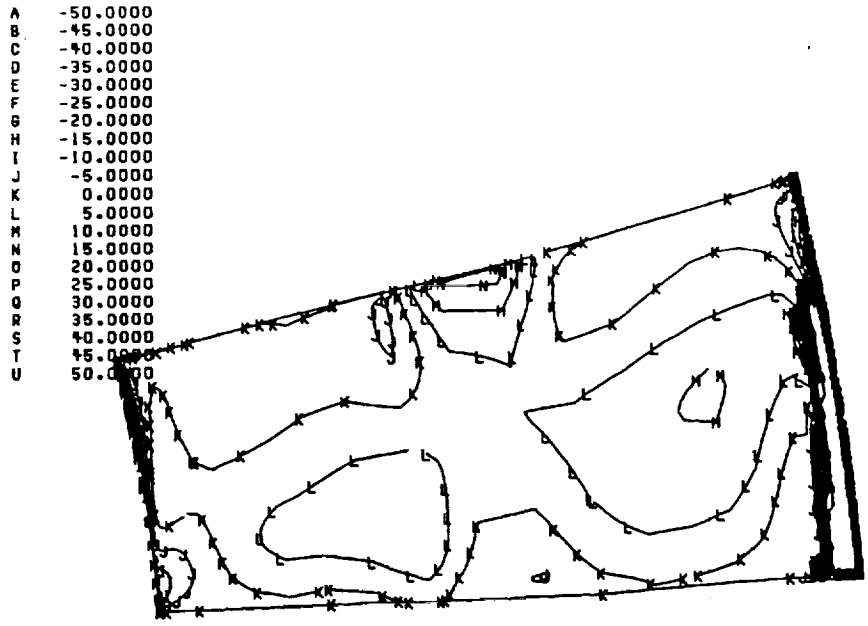
(h) Station 1.

Figure 20.—Continued.



Enhanced

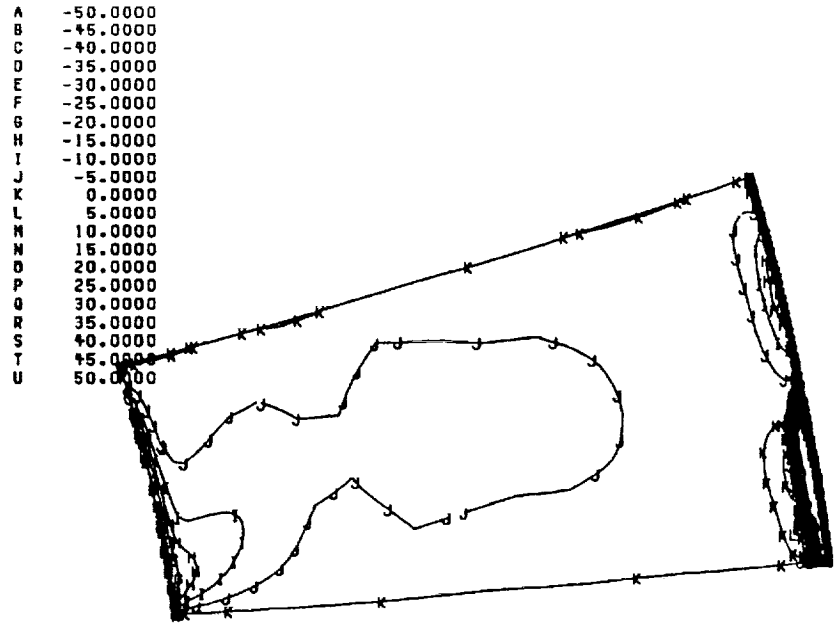
(i) Station 3.



Enhanced

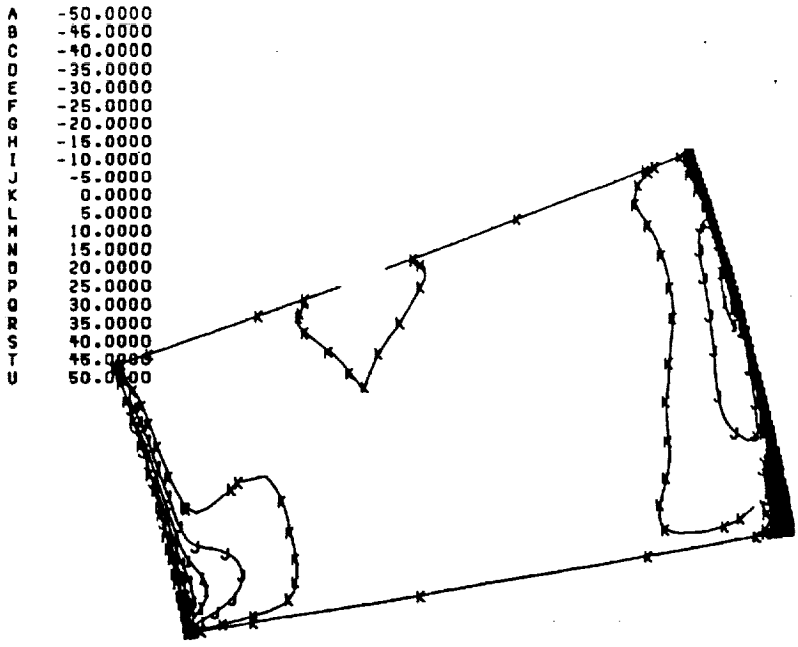
(j) Station 4.

Figure 20.—Continued.



Enhanced

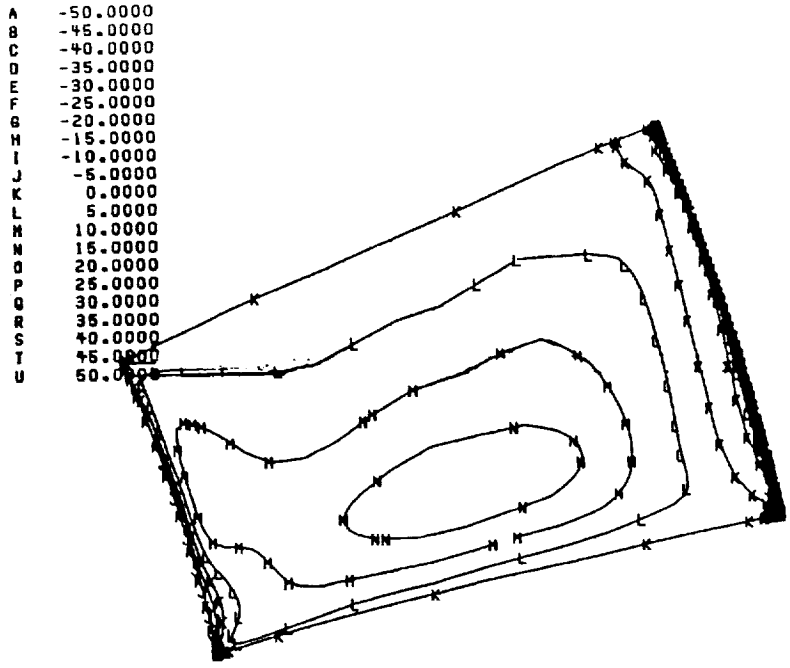
(k) Station 5.



Enhanced

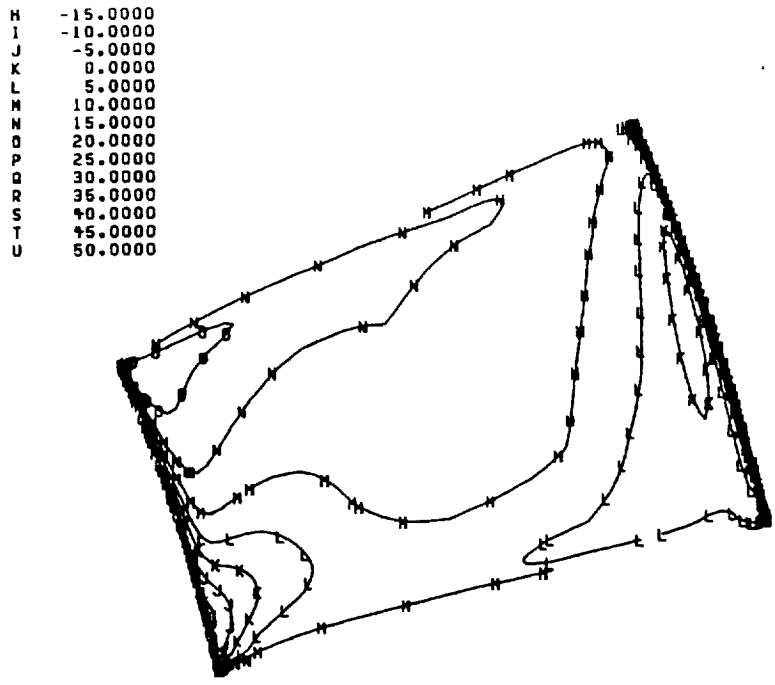
(l) Station 6.

Figure 20.—Continued.



Enhanced

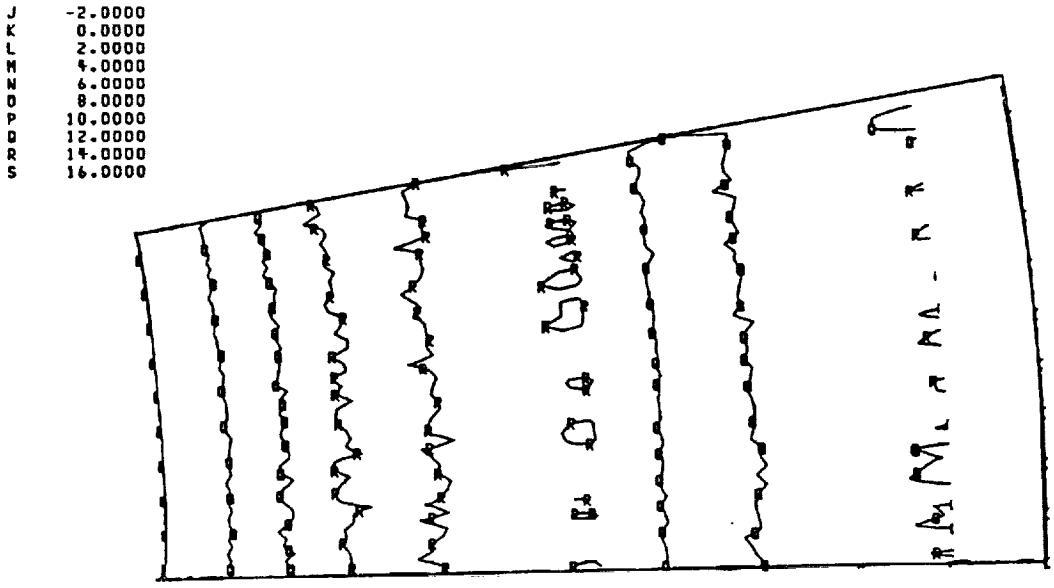
(m) Station 7.



Enhanced

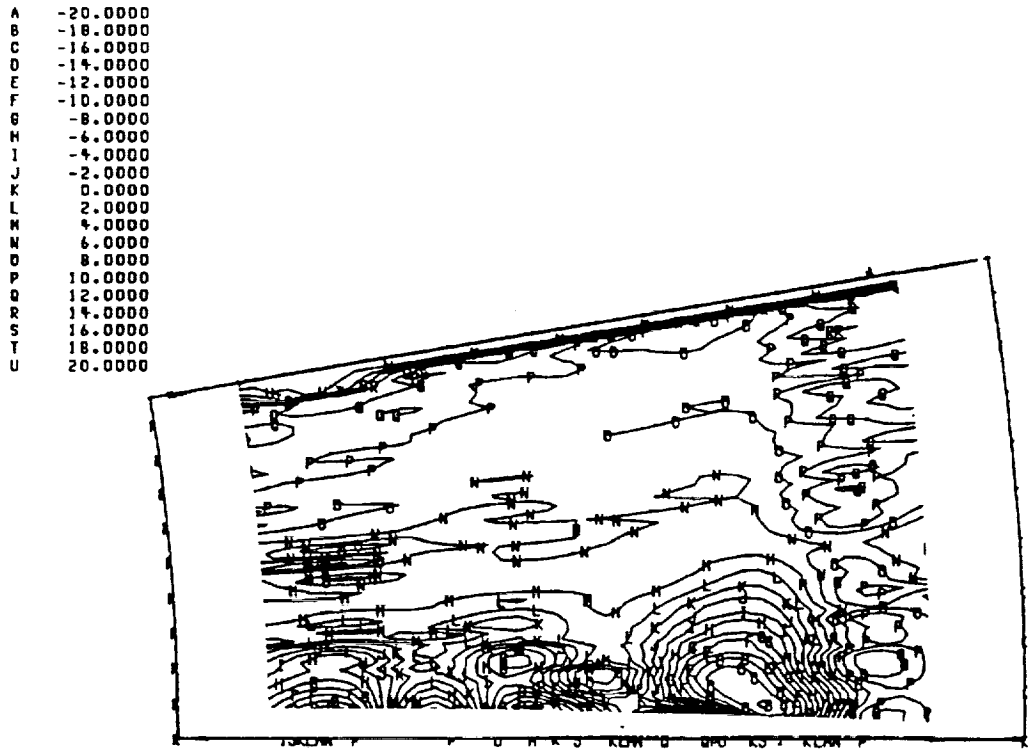
(n) Station 8.

Figure 20.—Concluded.



Baseline

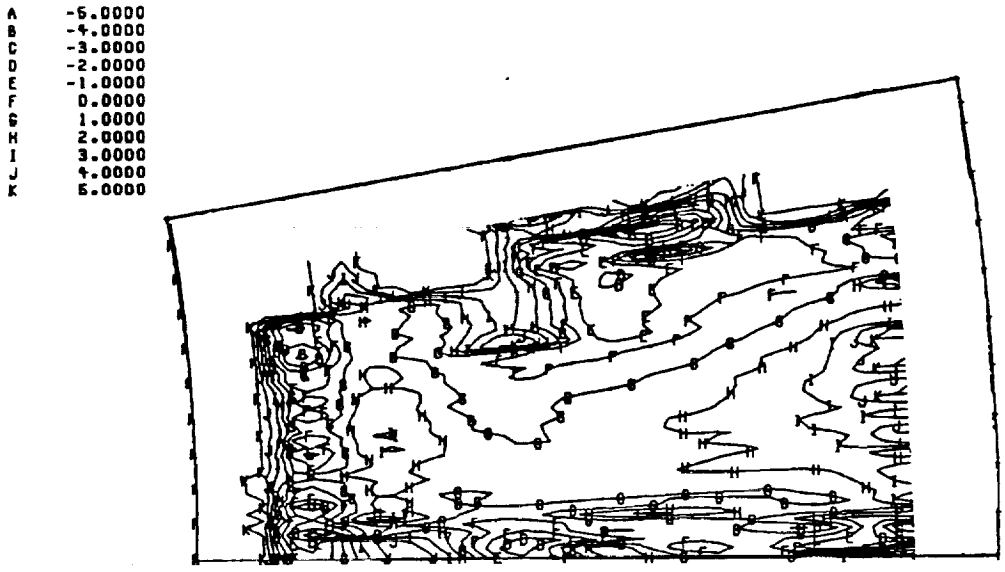
(a) Station 1.



Baseline

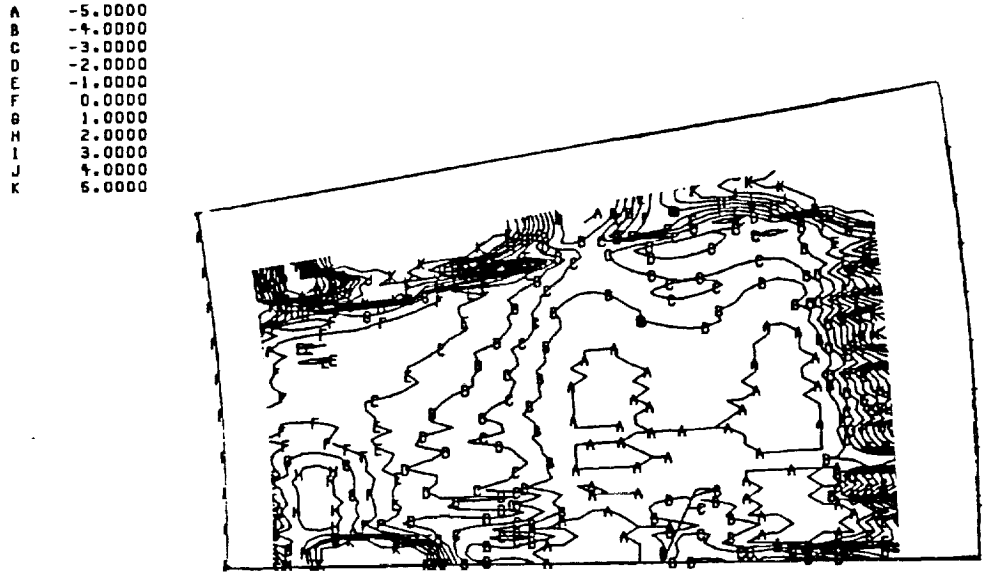
(b) Station 3.

Figure 21.—Measured relative flow angle/grid angle differences.



Baseline

(c) Station 4.

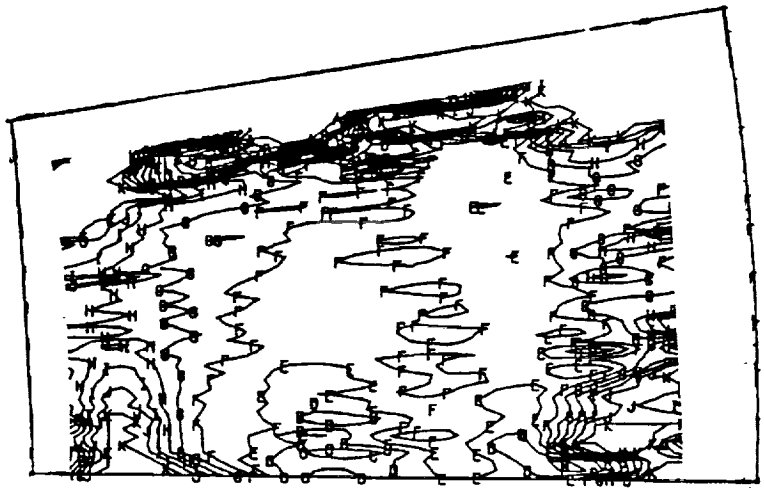


Baseline

(d) Station 5.

Figure 21.—Continued.

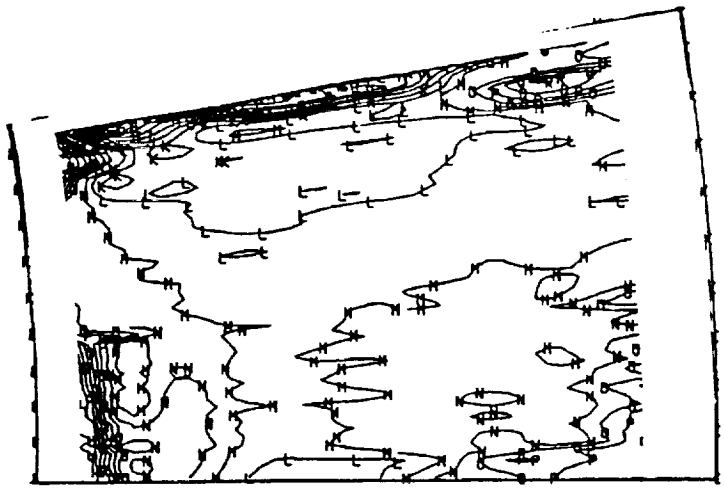
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D	-2.0000
E	-1.0000
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G	1.0000
H	2.0000
I	3.0000
J	4.0000
K	5.0000



Baseline

(e) Station 6.

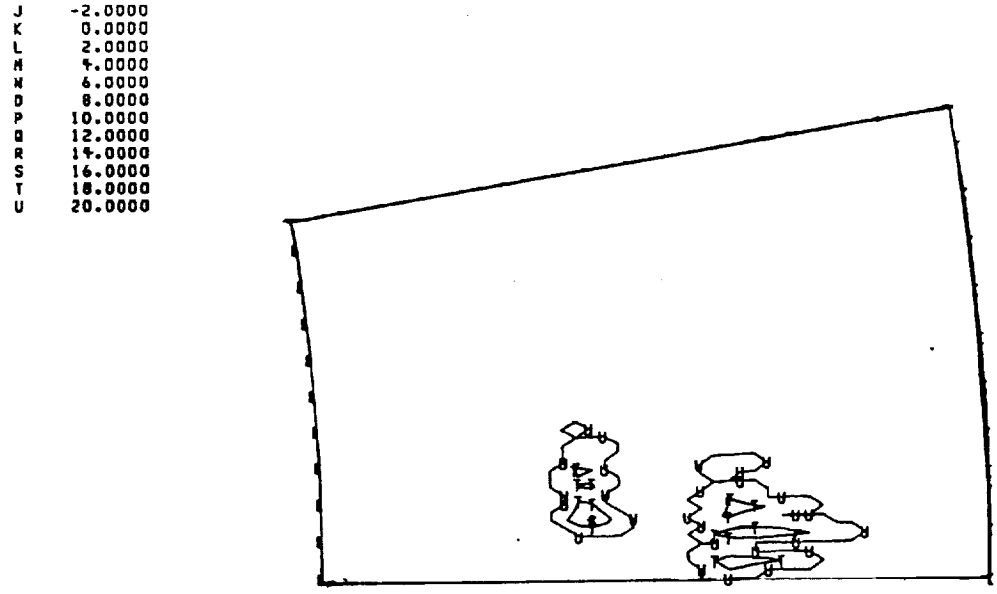
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G	-8.0000
H	-6.0000
I	-4.0000
J	-2.0000
K	0.0000
L	2.0000
M	4.0000
N	6.0000
O	8.0000
P	10.0000
Q	12.0000
R	14.0000
S	16.0000
T	18.0000
U	20.0000



Baseline

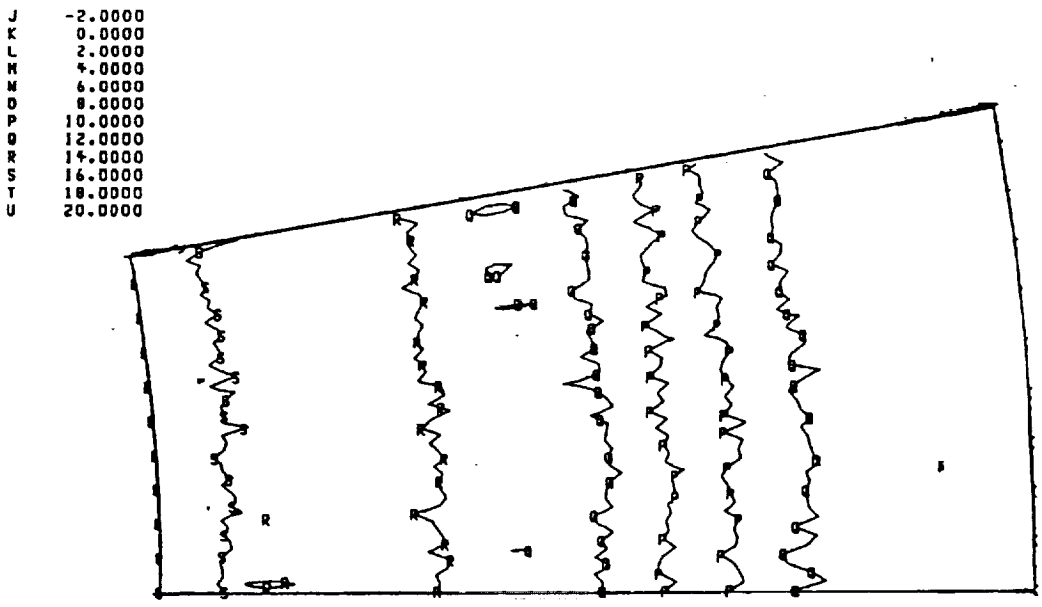
(f) Station 7.

Figure 21.—Continued.



Baseline

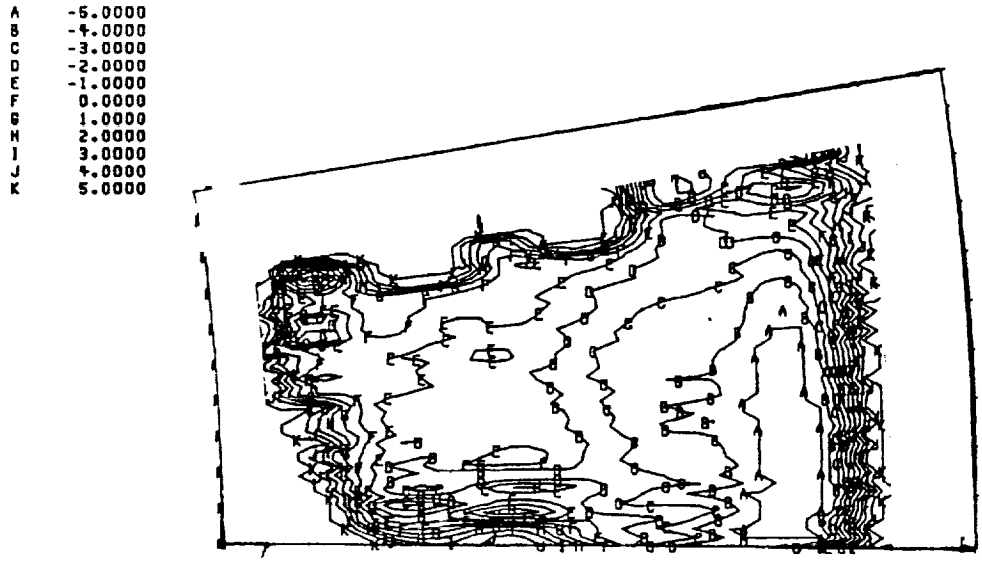
(g) Station 8.



Enhanced

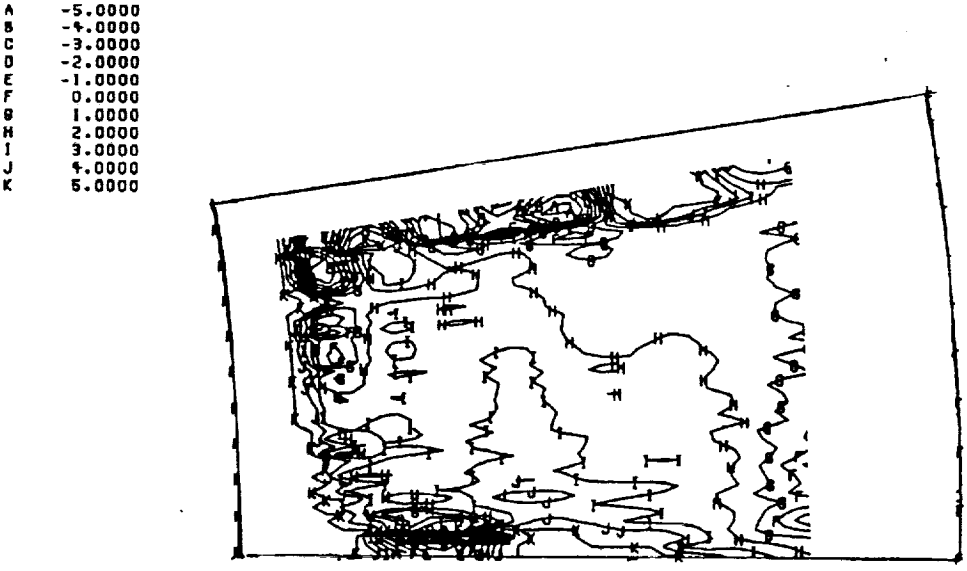
(h) Station 1.

Figure 21.—Continued.



Enhanced

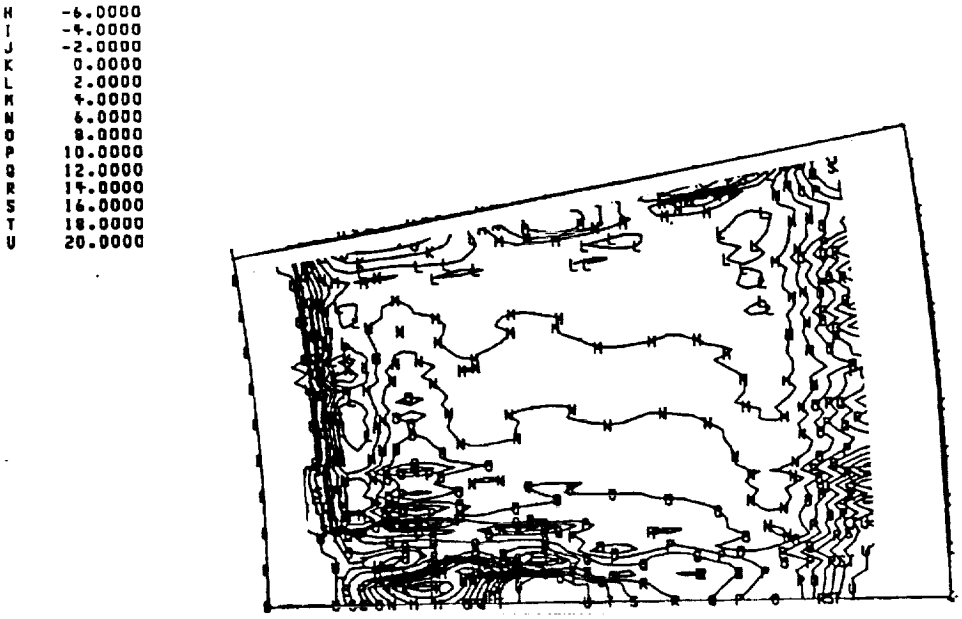
(k) Station 5.



Enhanced

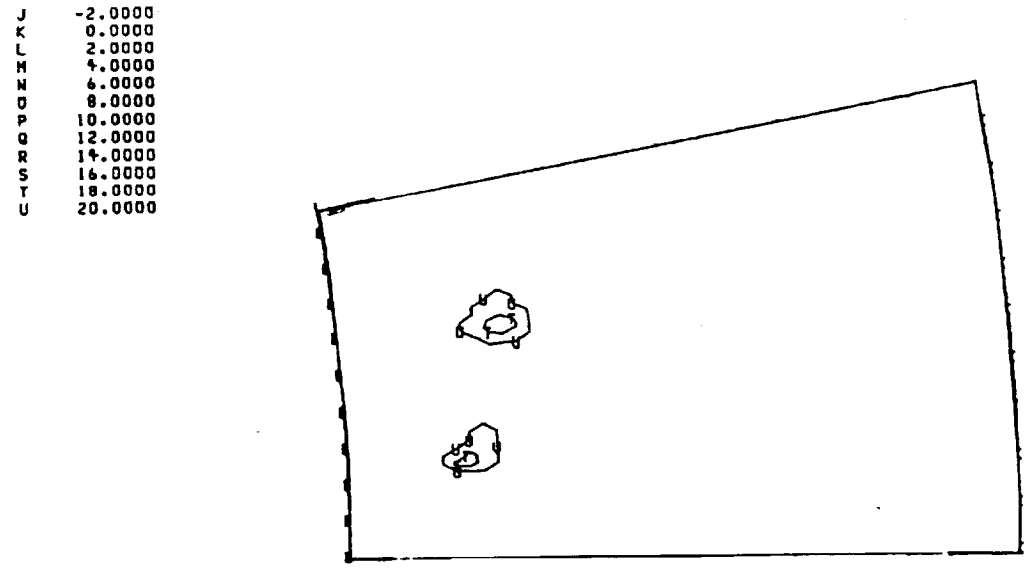
(l) Station 6.

Figure 21.—Continued.



Enhanced

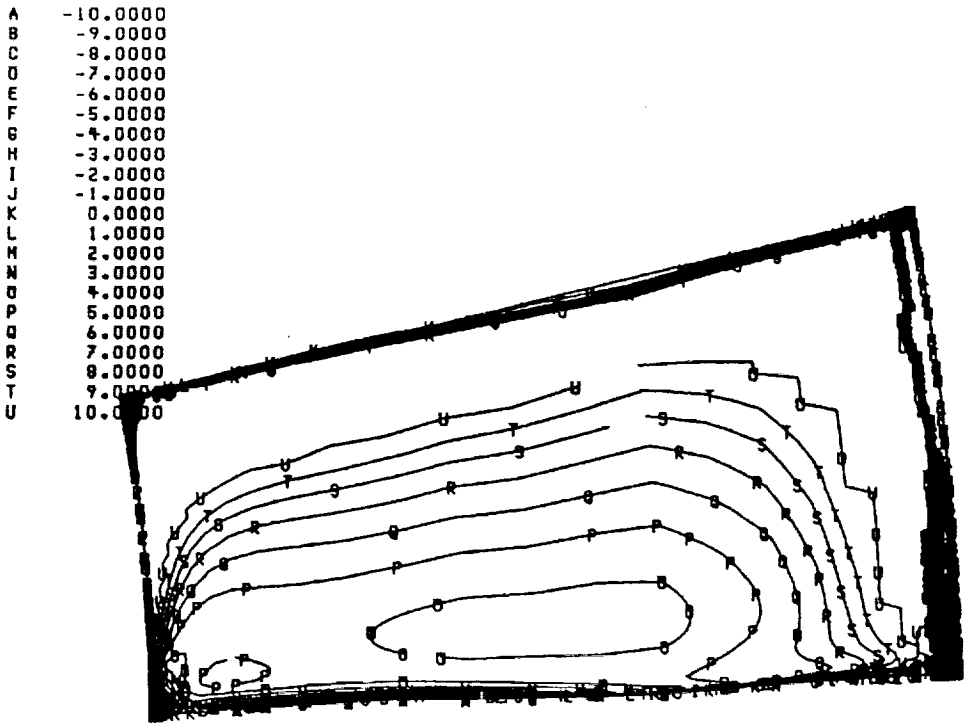
(m) Station 7.



Enhanced

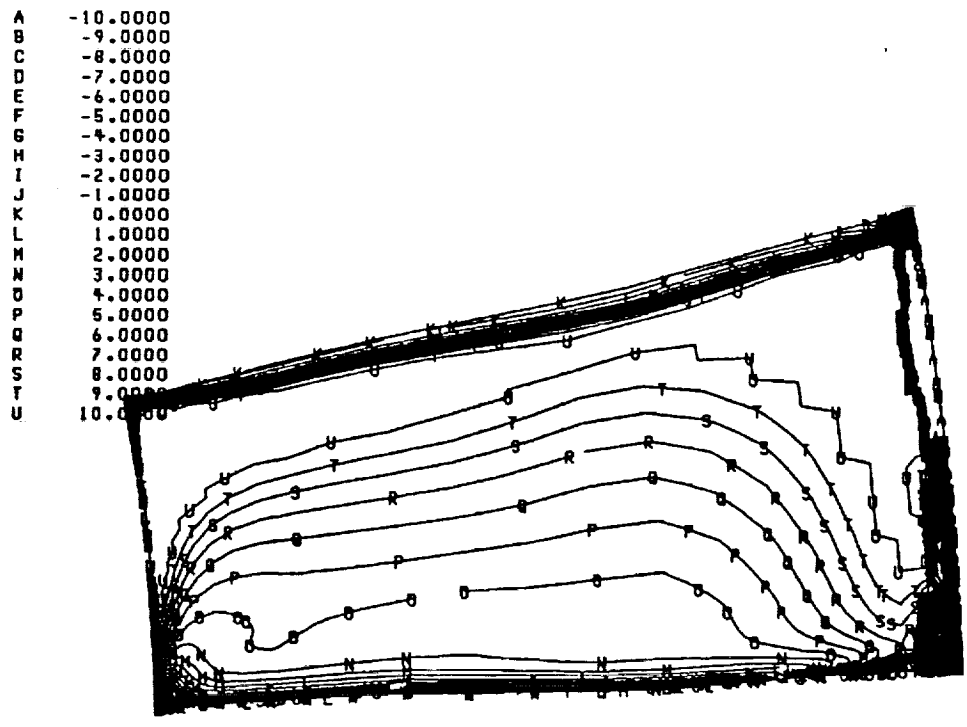
(n) Station 8.

Figure 21.—Concluded.



Baseline

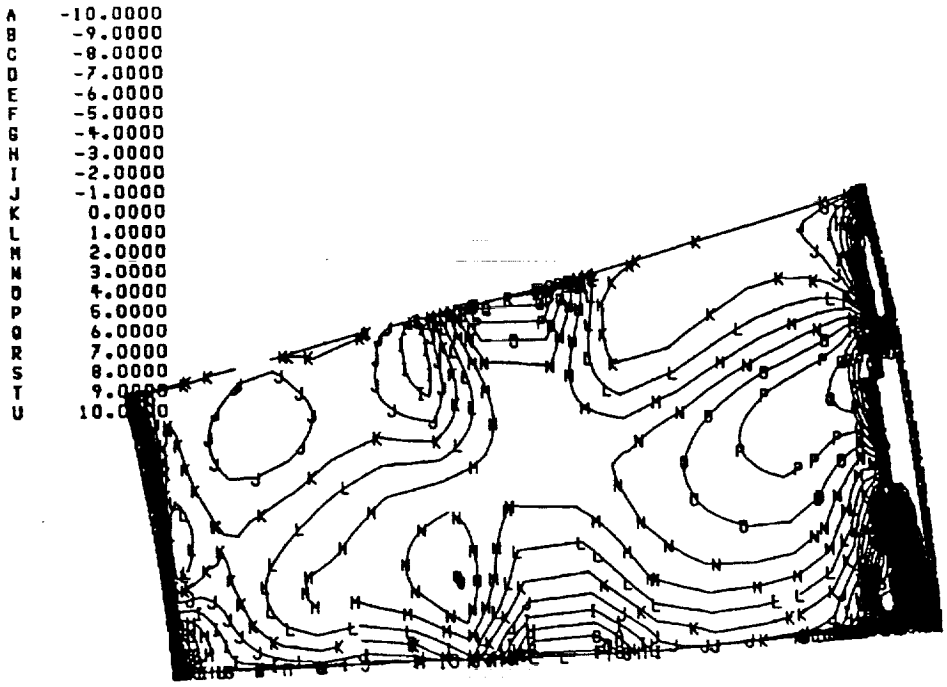
(a) Station 1.



Baseline

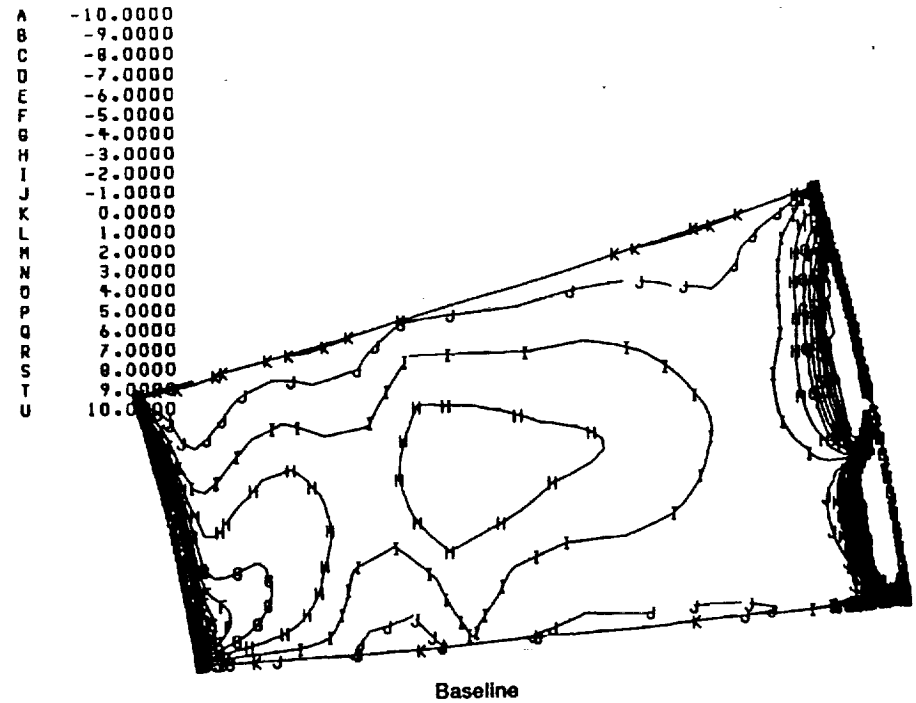
(b) Station 3.

Figure 22.—Predicted relative flow angle/grid angle differences.



Baseline

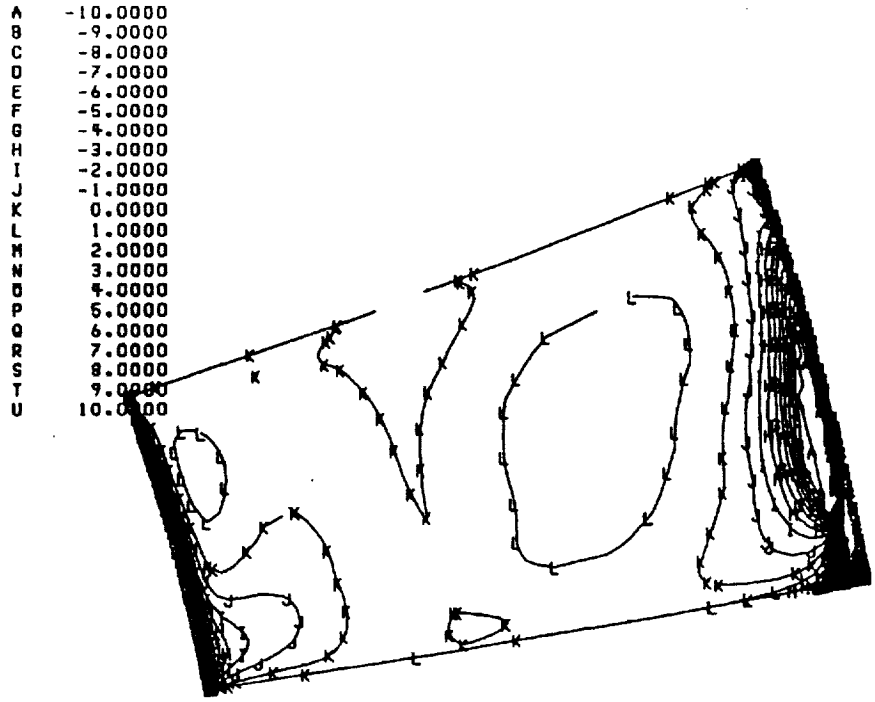
(c) Station 4.



Baseline

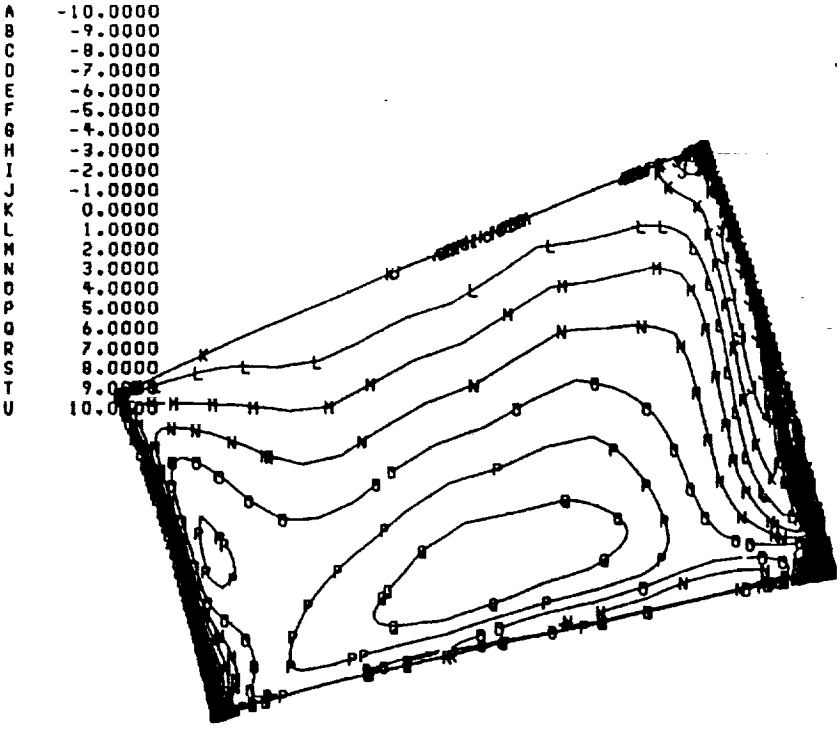
(d) Station 5.

Figure 22.—Continued.



Baseline

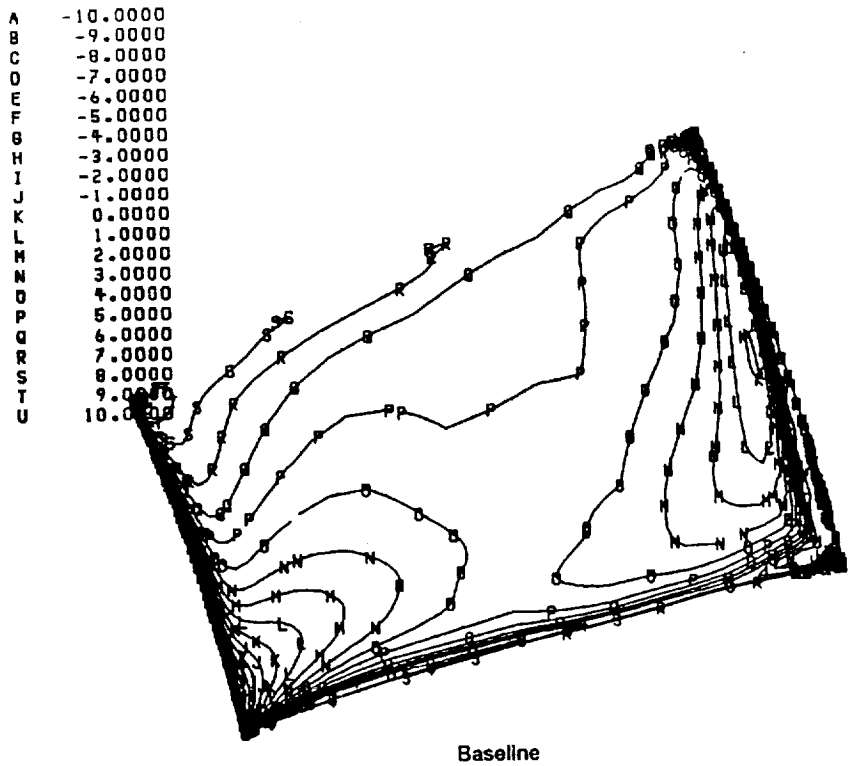
(e) Station 6.



Baseline

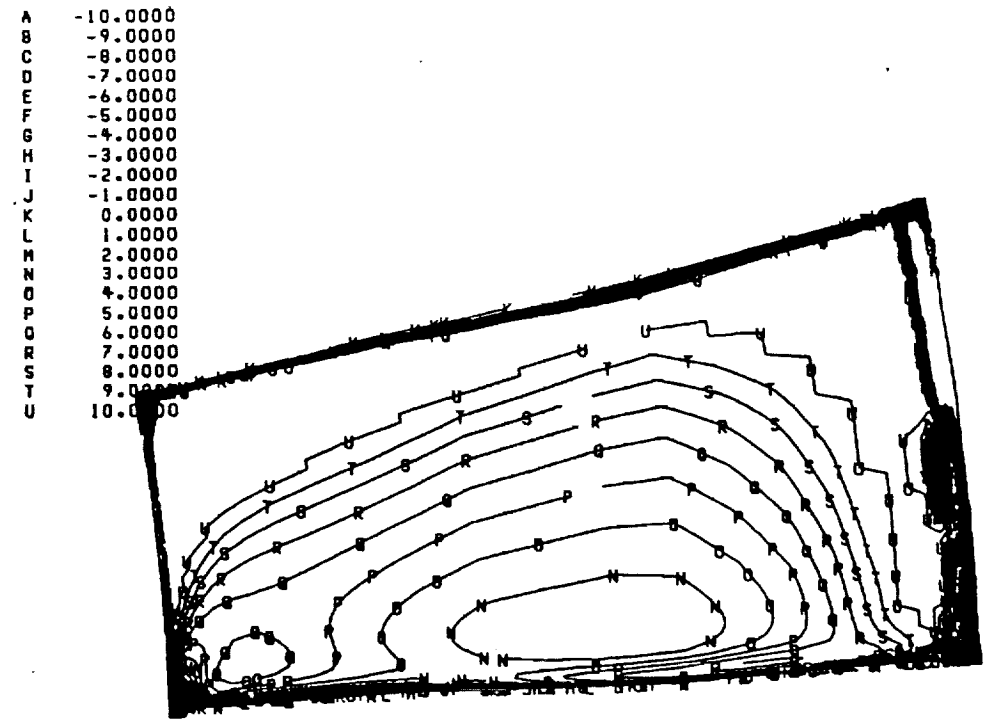
(f) Station 7.

Figure 22.—Continued.



Baseline

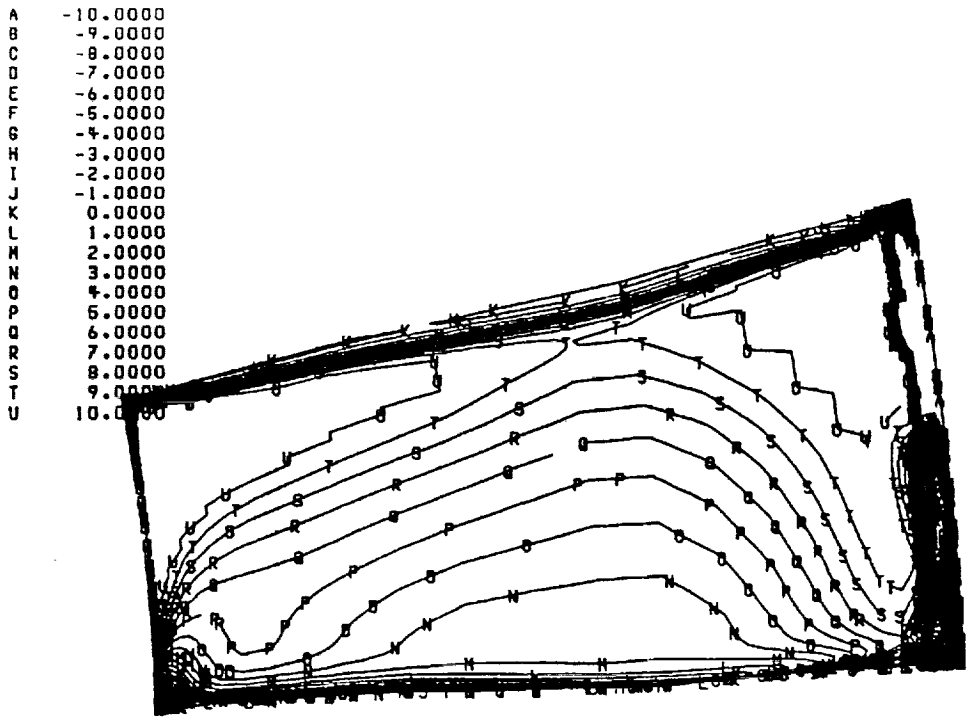
(g) Station 8.



Enhanced

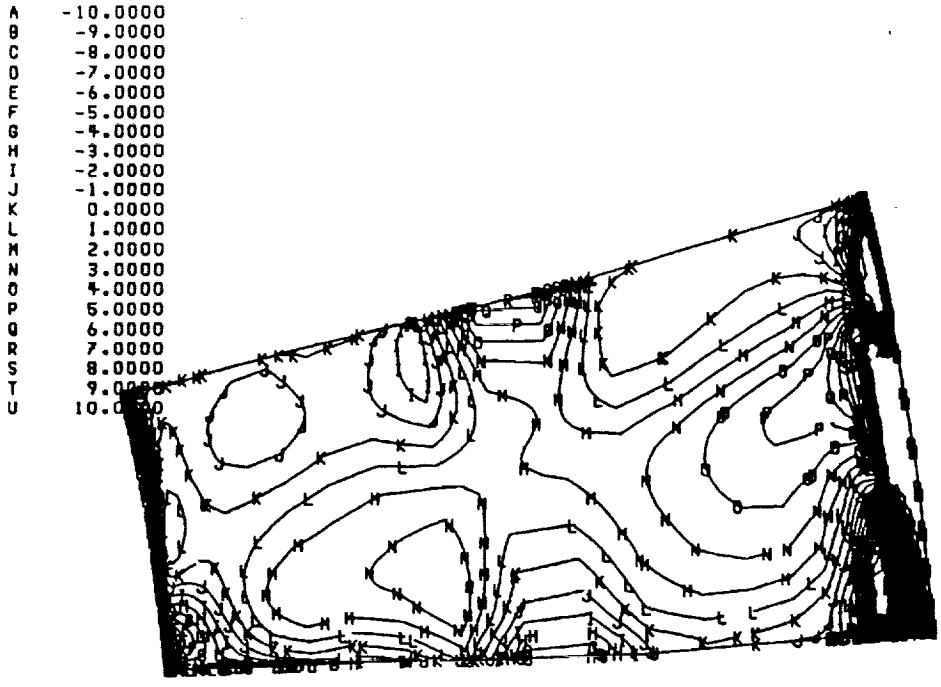
(h) Station 1.

Figure 22.—Continued.



Enhanced

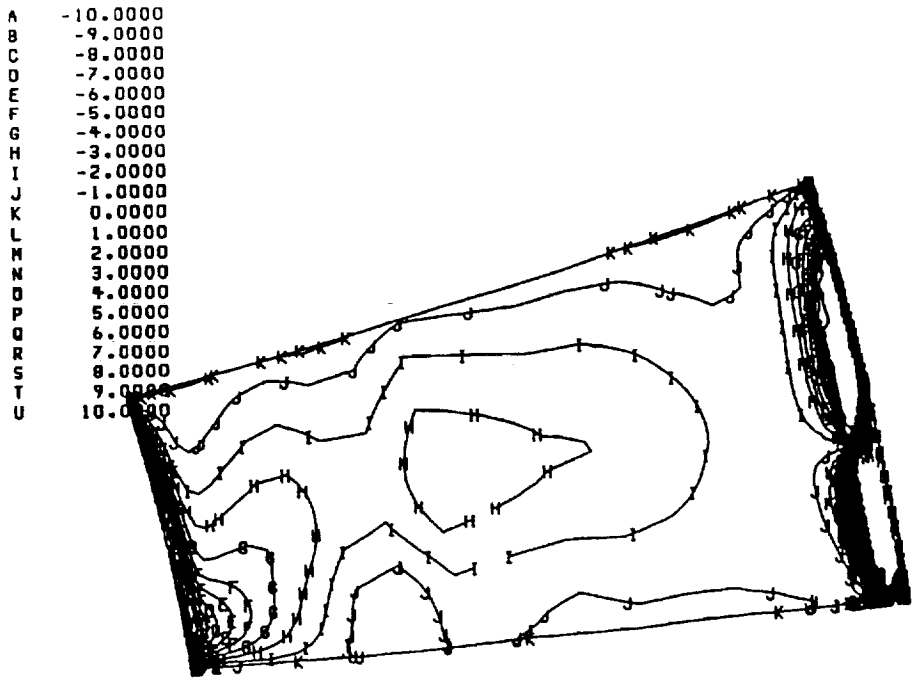
(i) Station 3.



Enhanced

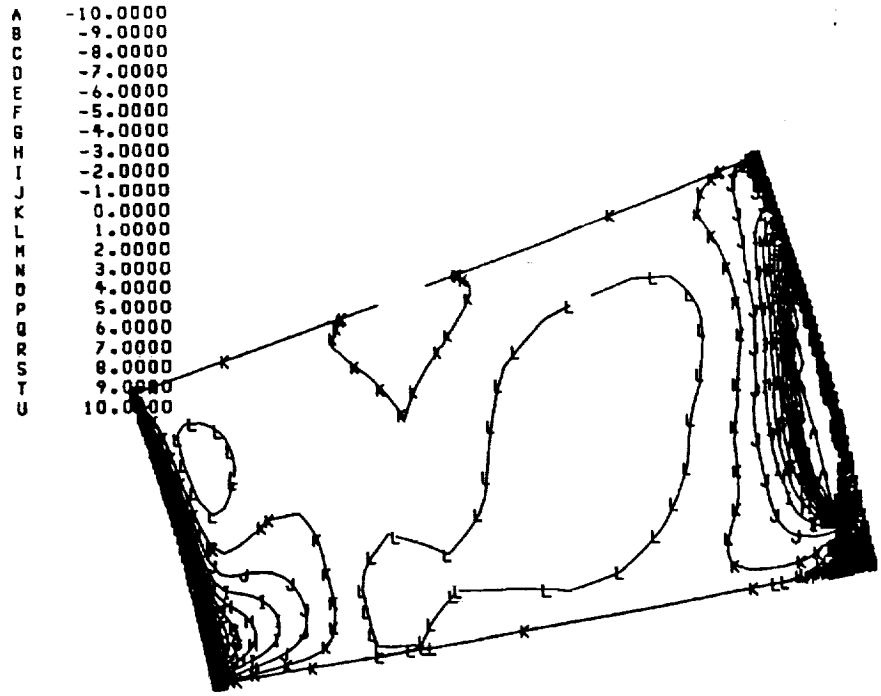
(j) Station 4.

Figure 22.—Continued.



Enhanced

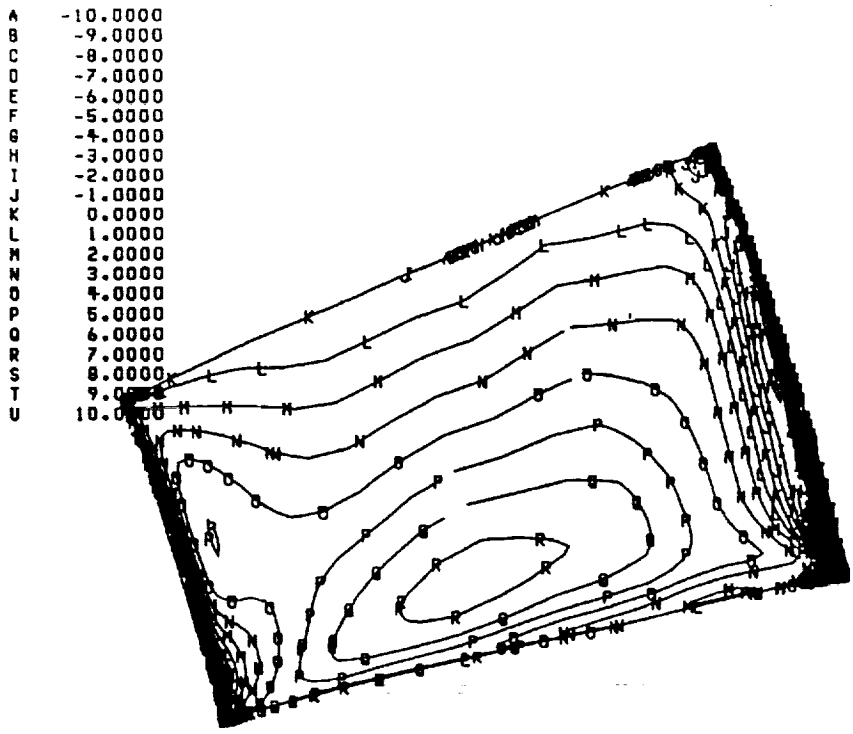
(k) Station 5.



Enhanced

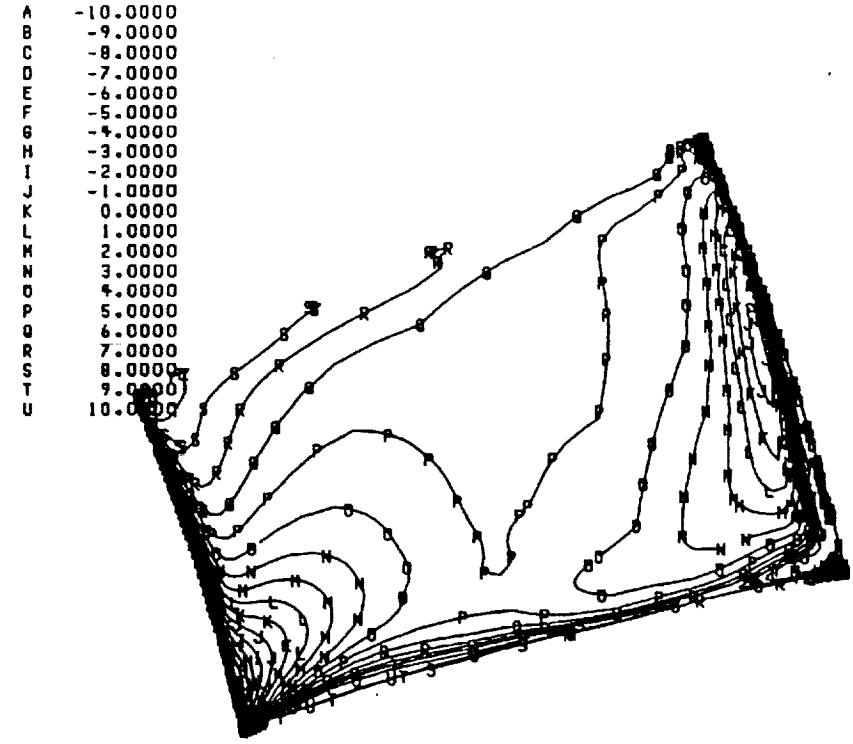
(l) Station 6.

Figure 22.—Continued.



Enhanced

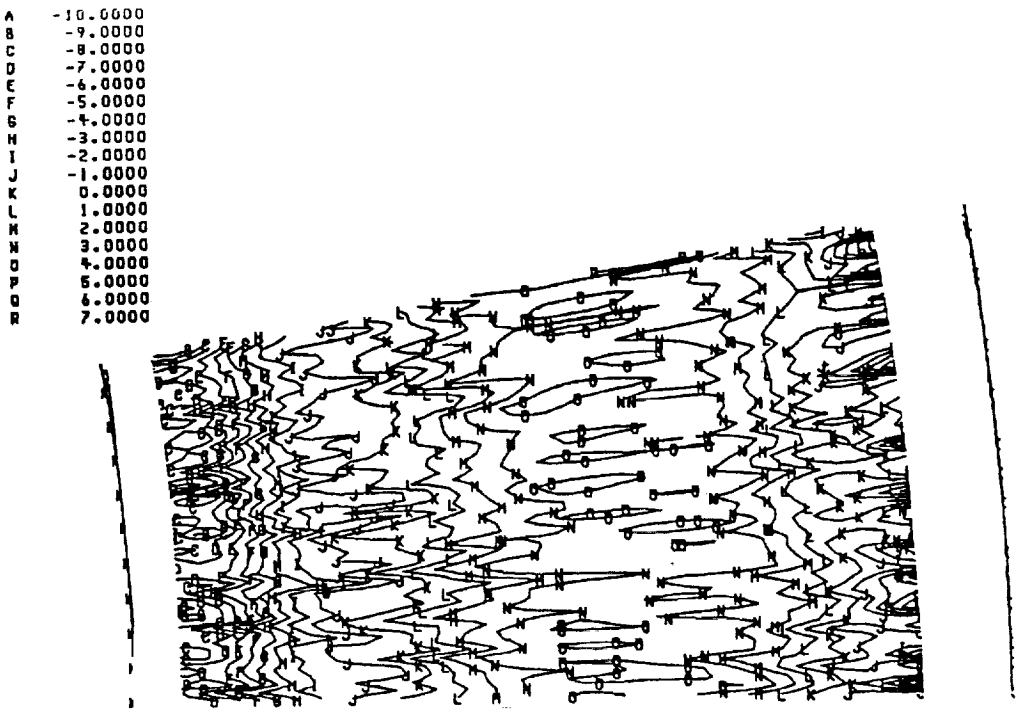
(m) Station 7.



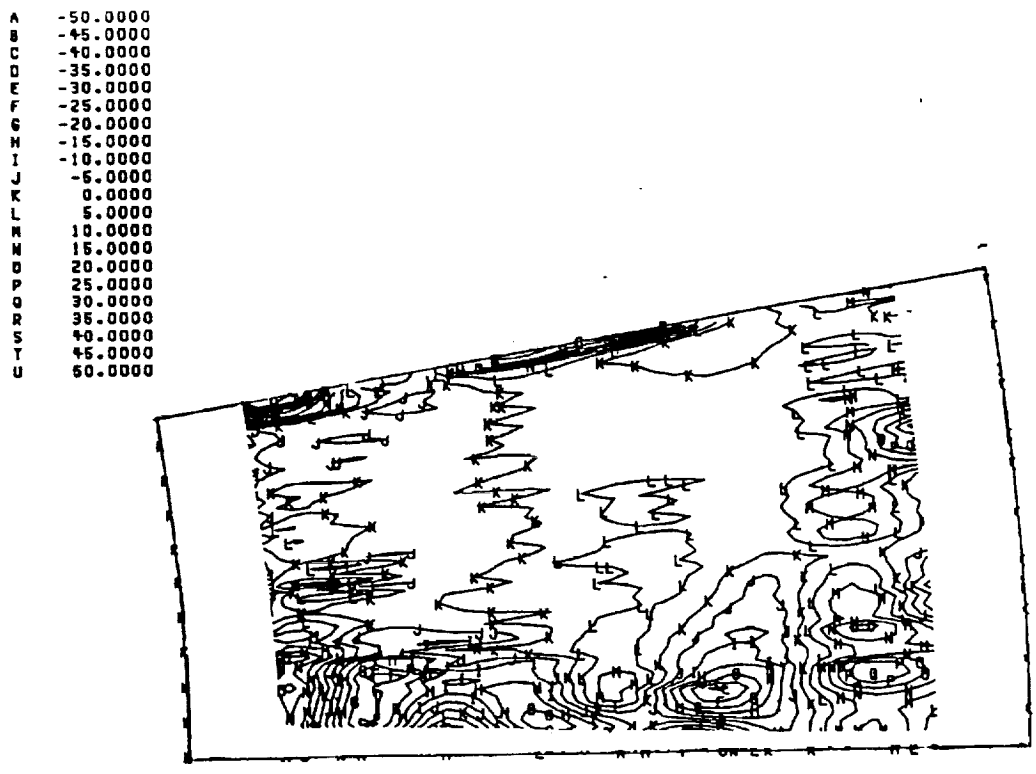
Enhanced

(n) Station 8.

Figure 22.—Concluded.



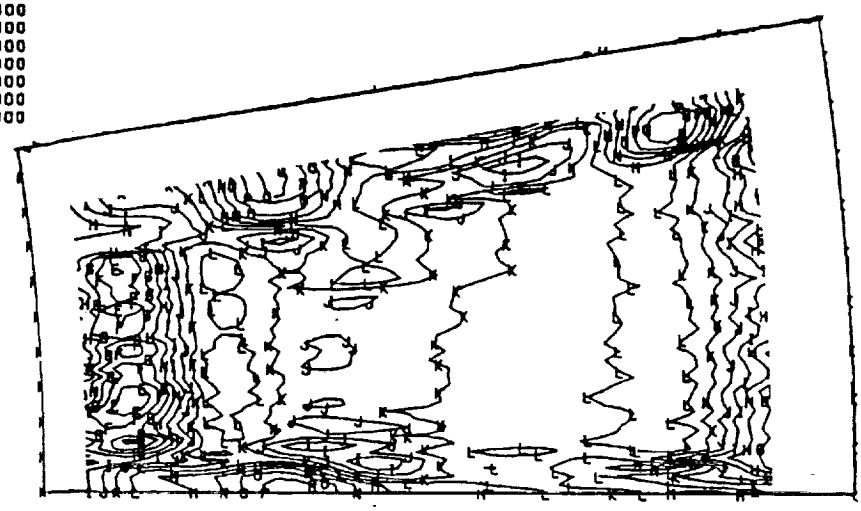
(a) Station 1.



(b) Station 3.

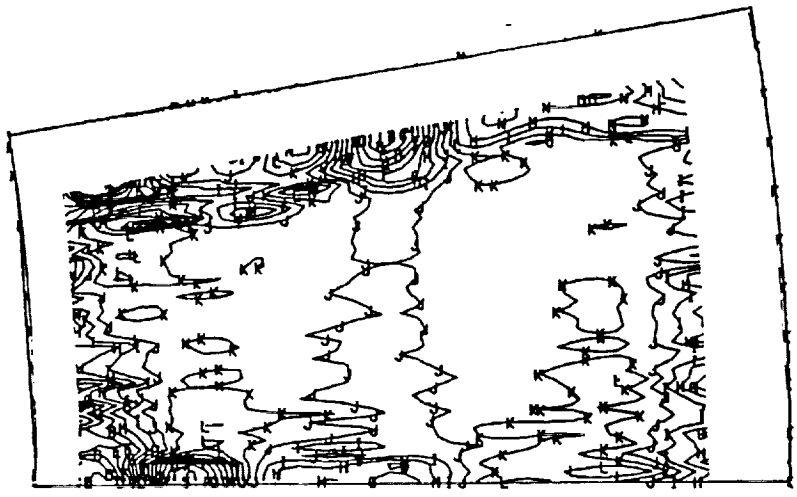
Figure 23.—Measured differences in deviation velocities $v_{sec,b} - v_{sec,a}$

A	-50.0000
B	-45.0000
C	-40.0000
D	-35.0000
E	-30.0000
F	-25.0000
G	-20.0000
H	-15.0000
I	-10.0000
J	-6.0000
K	0.0000
L	5.0000
M	10.0000
N	15.0000
O	20.0000
P	25.0000
Q	30.0000
R	35.0000
S	40.0000
T	45.0000
U	50.0000



(c) Station 4.

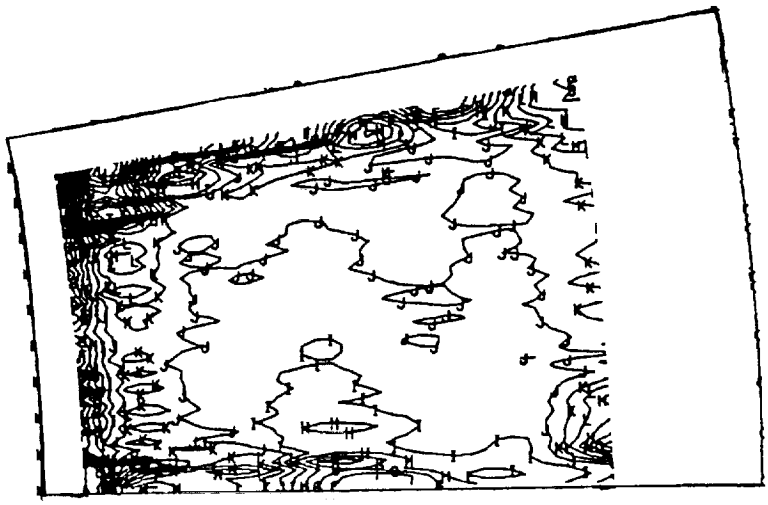
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B	-45.0000
C	-40.0000
D	-35.0000
E	-30.0000
F	-25.0000
G	-20.0000
H	-15.0000
I	-10.0000
J	-5.0000
K	0.0000
L	5.0000
M	10.0000
N	15.0000
O	20.0000
P	25.0000
Q	30.0000
R	35.0000
S	40.0000



(d) Station 5.

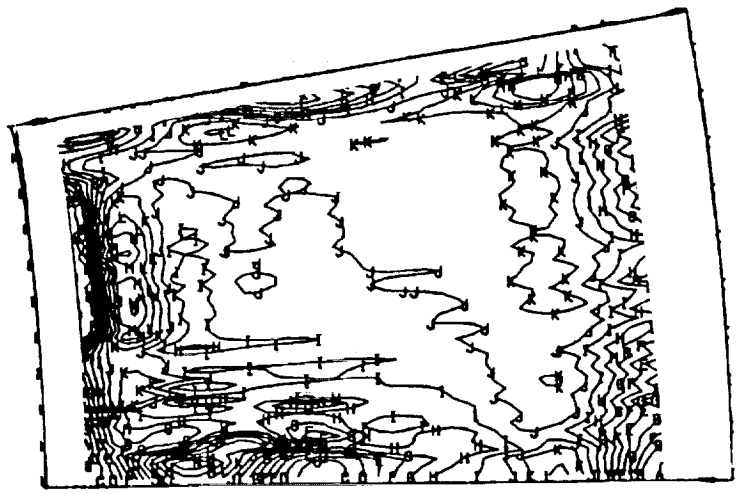
Figure 23.—Continued.

A	-50.0000
B	-45.0000
C	-40.0000
D	-35.0000
E	-30.0000
F	-25.0000
G	-20.0000
H	-15.0000
I	-10.0000
J	-5.0000
K	0.0000
L	5.0000
M	10.0000
N	15.0000
O	20.0000
P	25.0000
Q	30.0000
R	35.0000
S	40.0000
T	45.0000
U	50.0000



(e) Station 6.

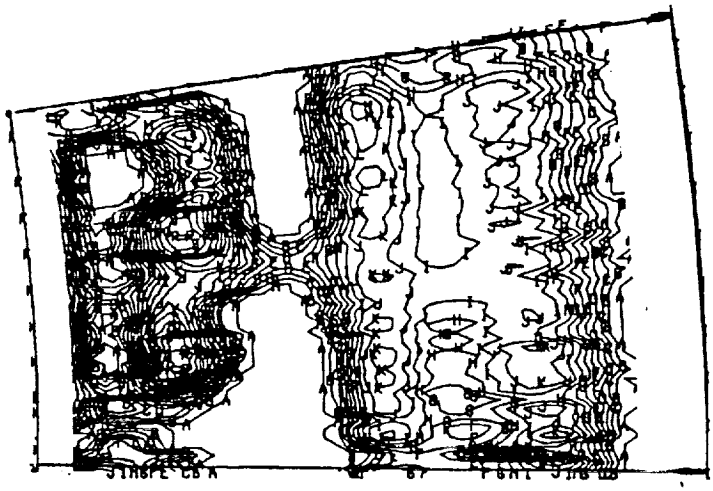
A	-50.0000
B	-45.0000
C	-40.0000
D	-35.0000
E	-30.0000
F	-25.0000
G	-20.0000
H	-15.0000
I	-10.0000
J	-5.0000
K	0.0000
L	5.0000
M	10.0000
N	15.0000
O	20.0000
P	25.0000



(f) Station 7.

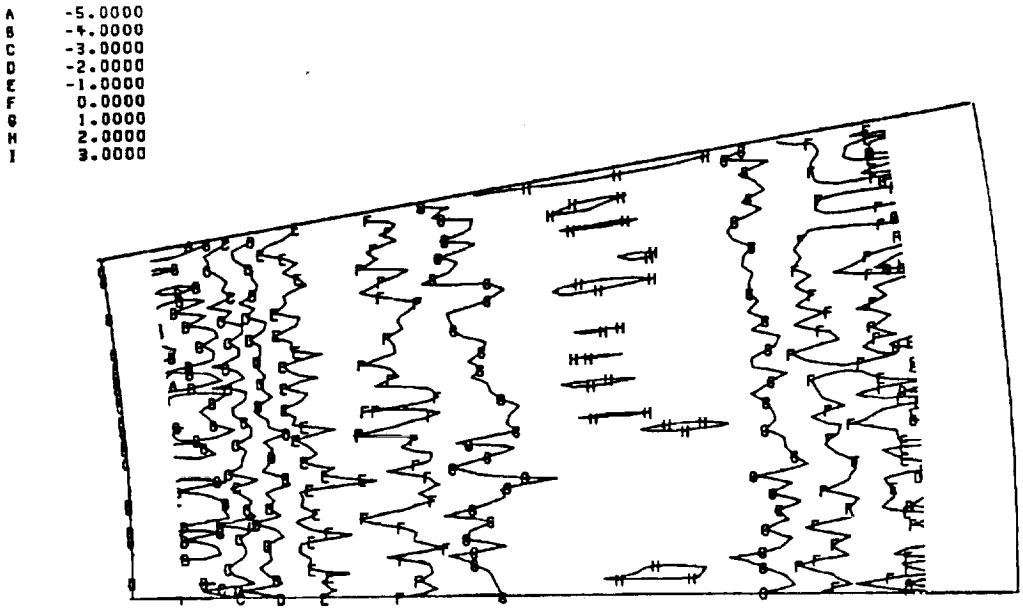
Figure 23.—Continued.

A	-50.0000
B	-45.0000
C	-40.0000
D	-35.0000
E	-30.0000
F	-25.0000
G	-20.0000
H	-15.0000
I	-10.0000
J	-5.0000
K	0.0000
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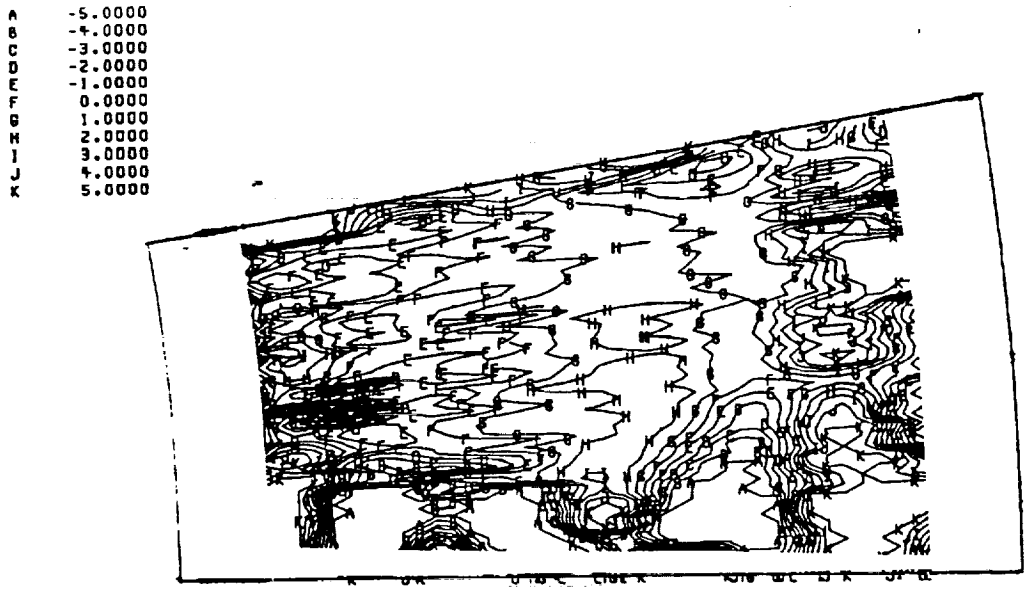


(g) Station 8.

Figure 23.—Concluded.

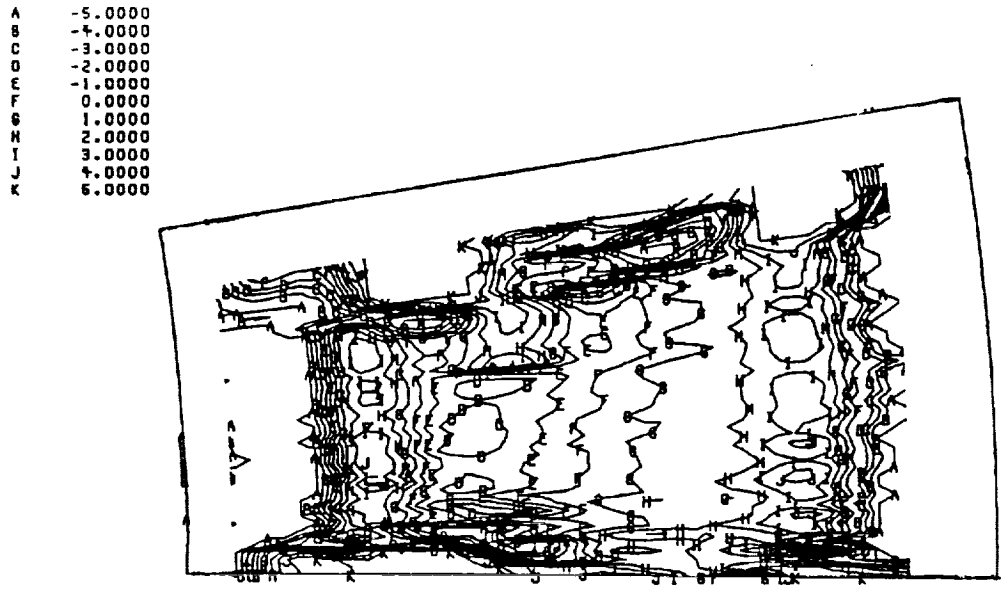


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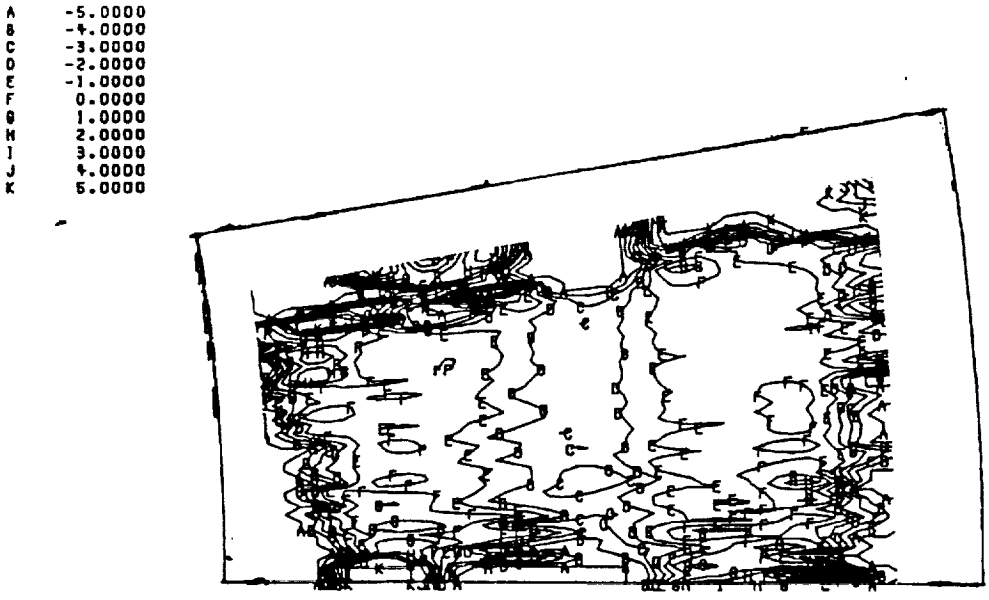


(b) Station 3.

Figure 24.—Measured differences between relative flow angles.

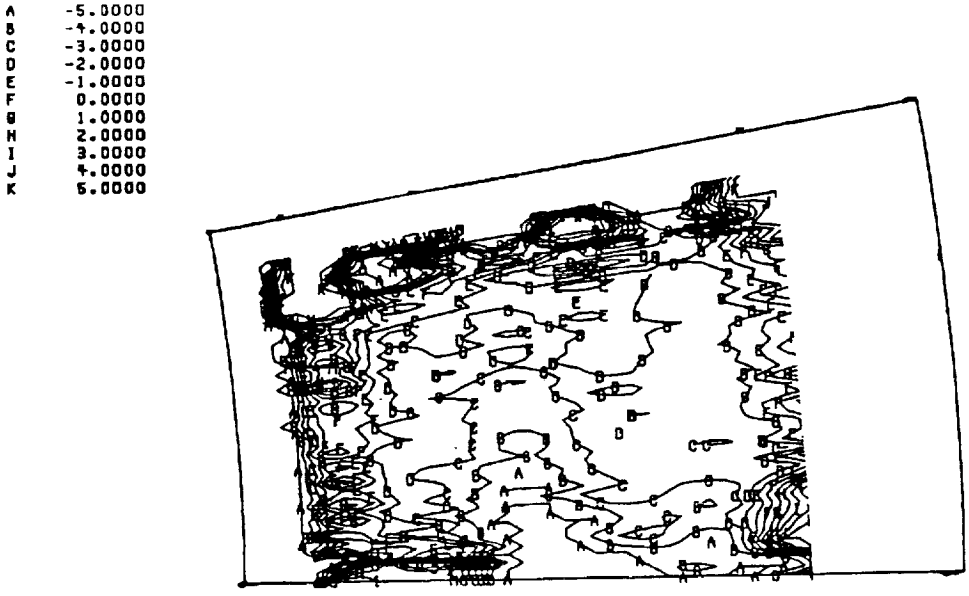


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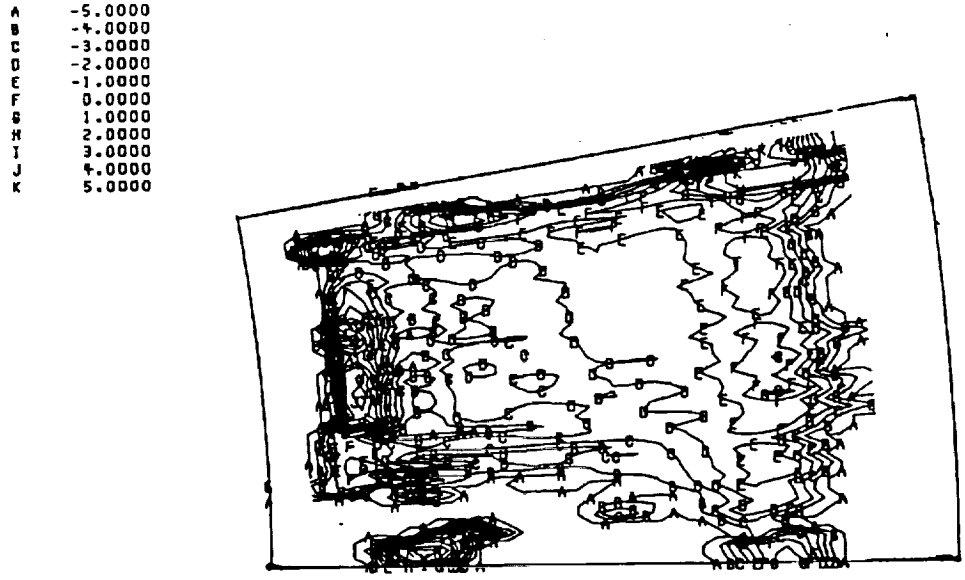


(d) Station 5.

Figure 24.—Continued.

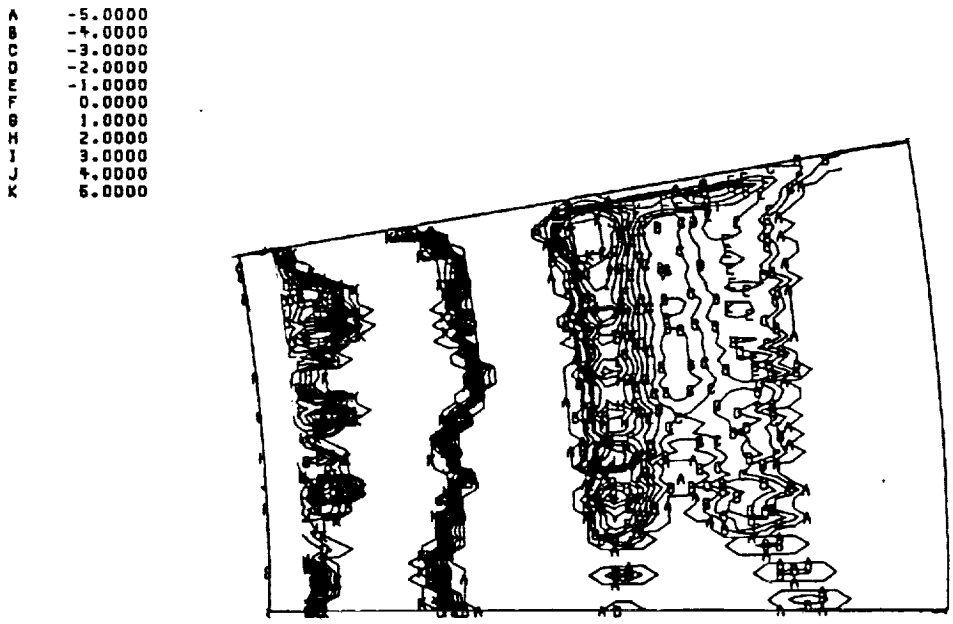


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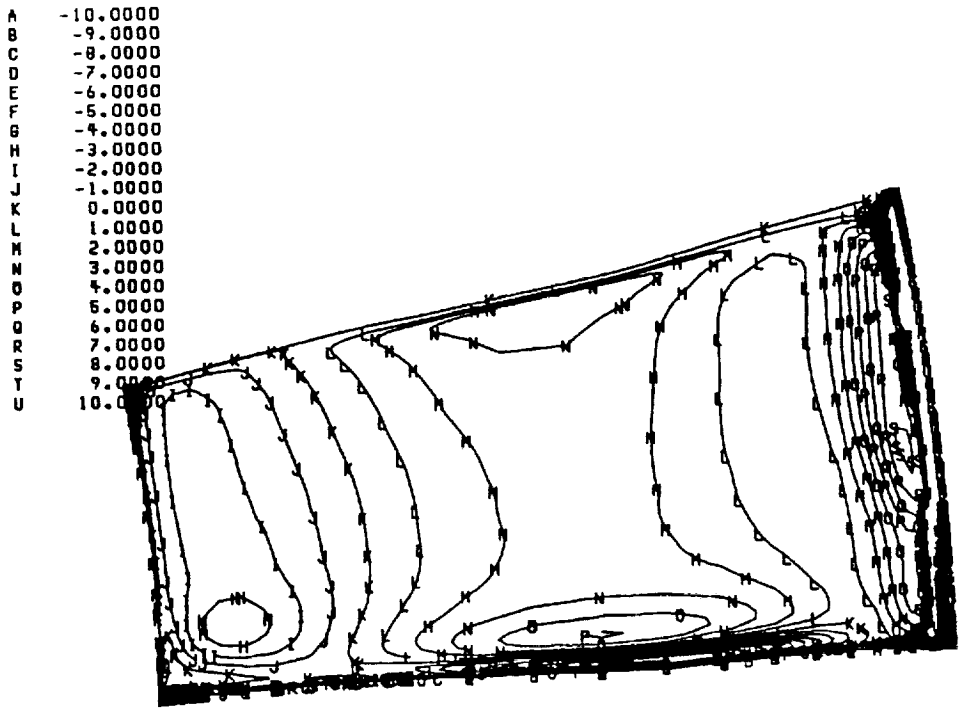
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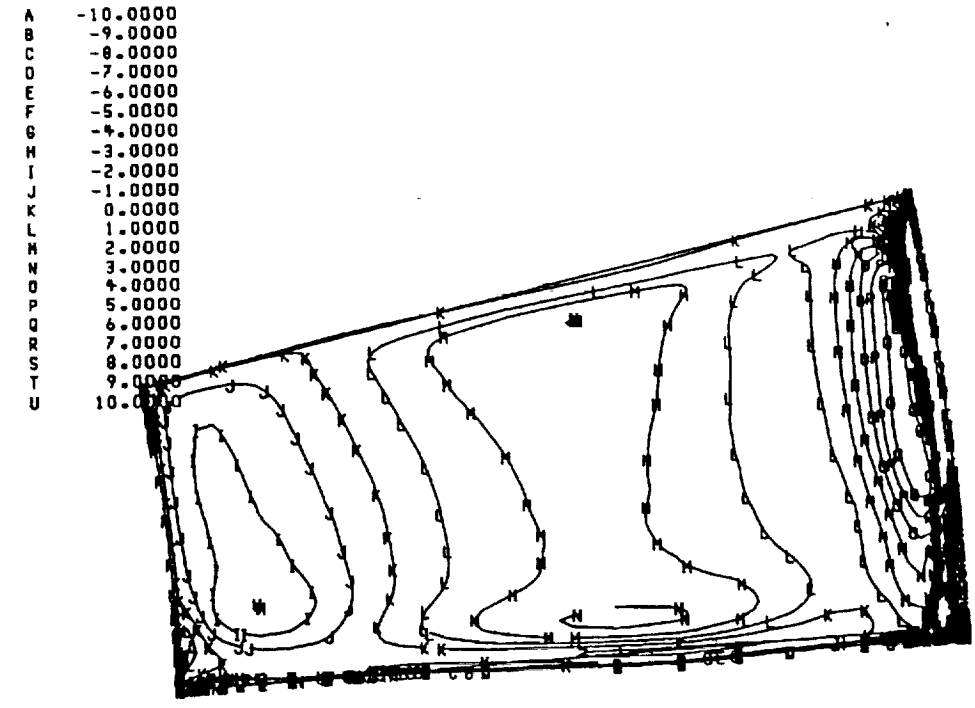


(g) Station 8.

Figure 24.—Concluded.

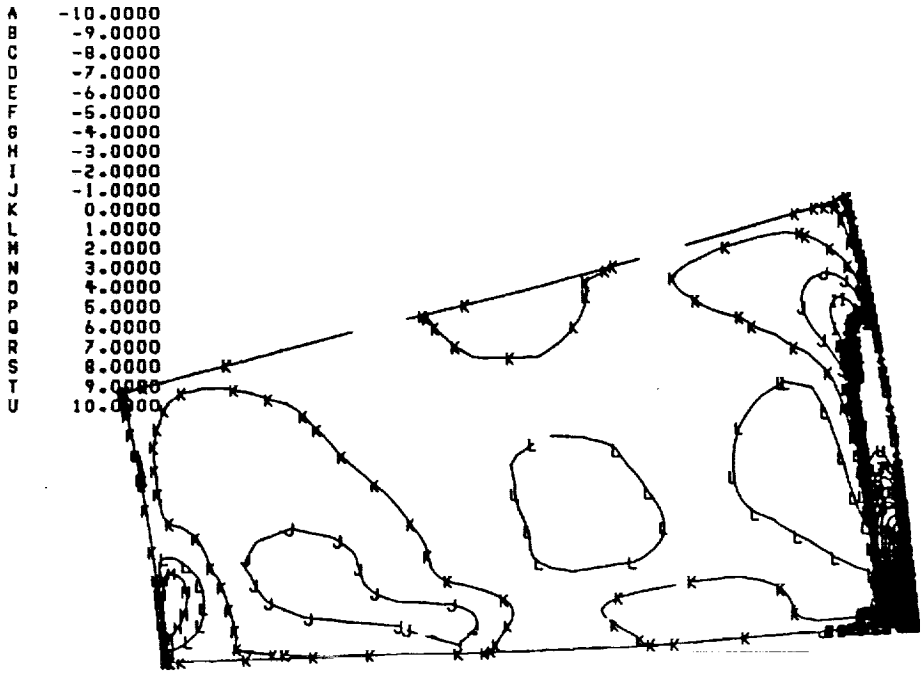


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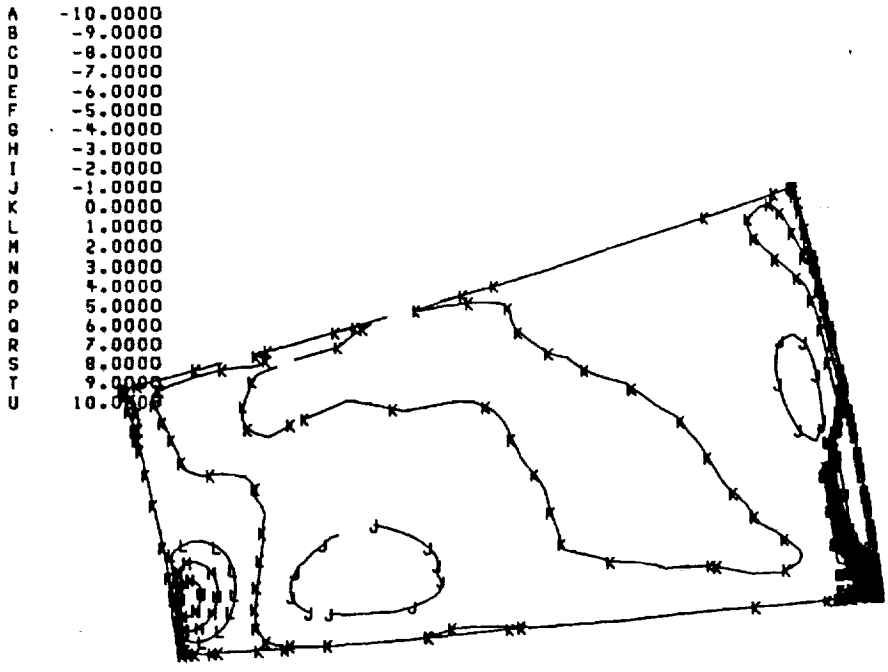


(b) Station 3.

Figure 25.—Predicted differences in deviation velocities $v_{sec,b} - v_{sec,a}$.

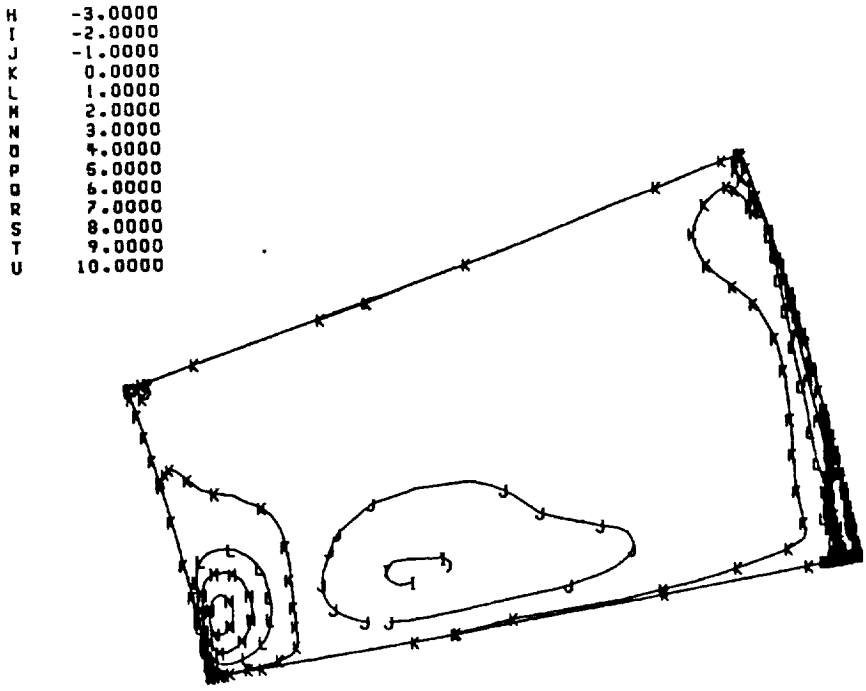


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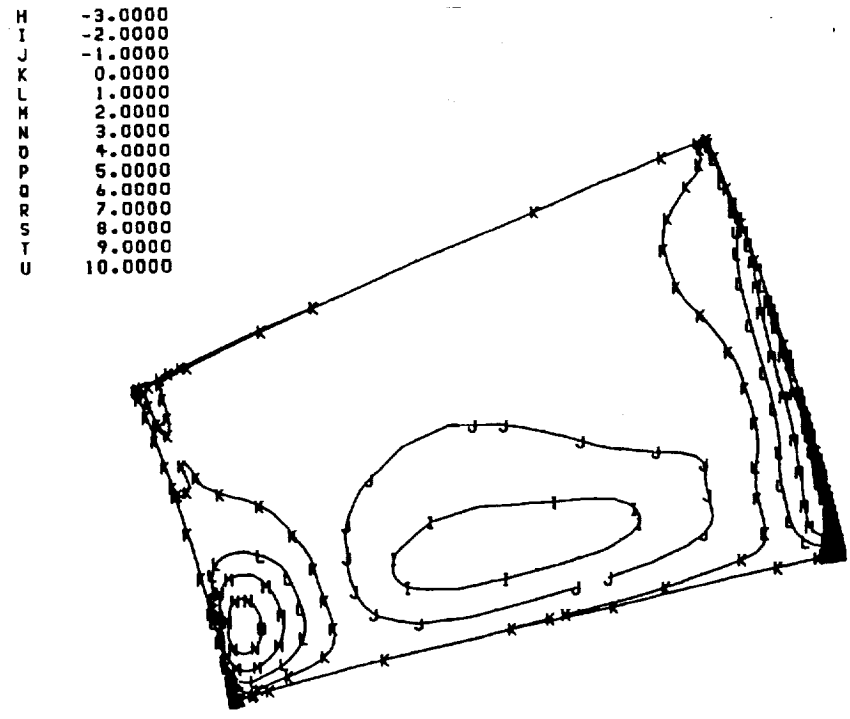


(d) Station 5.

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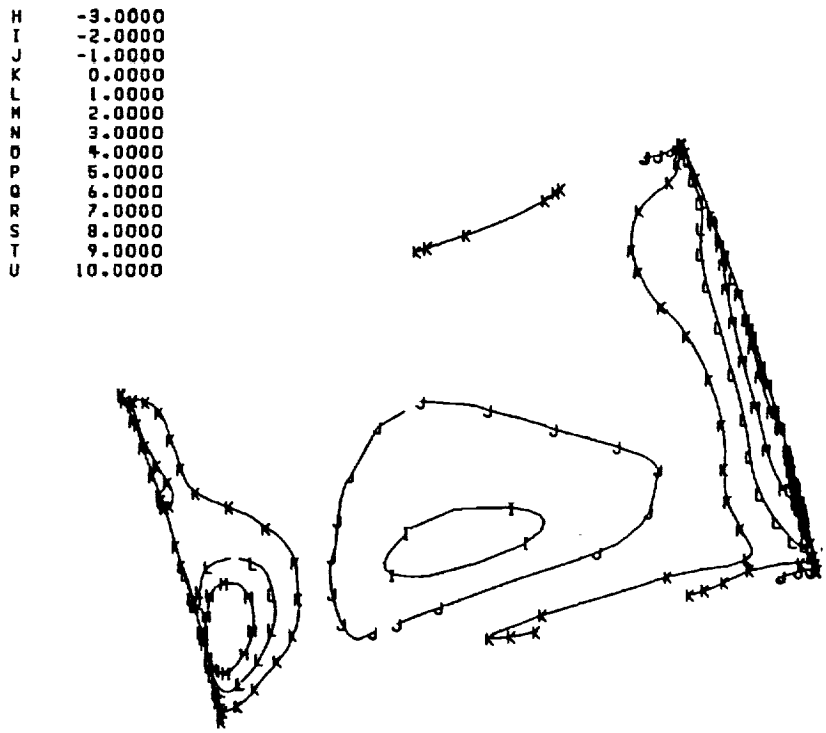


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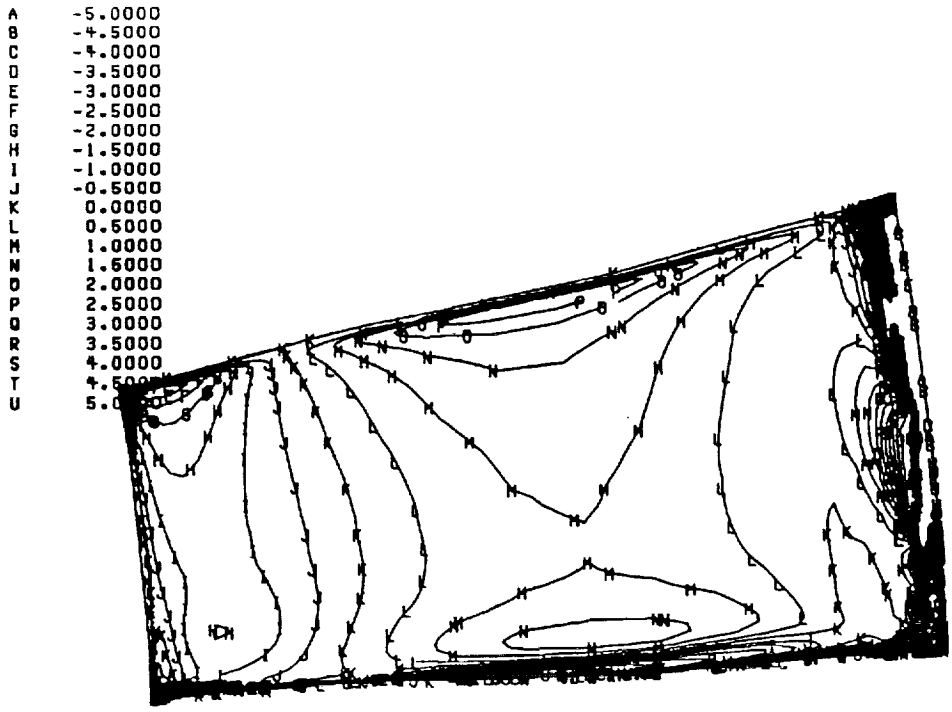
(f) Station 7.

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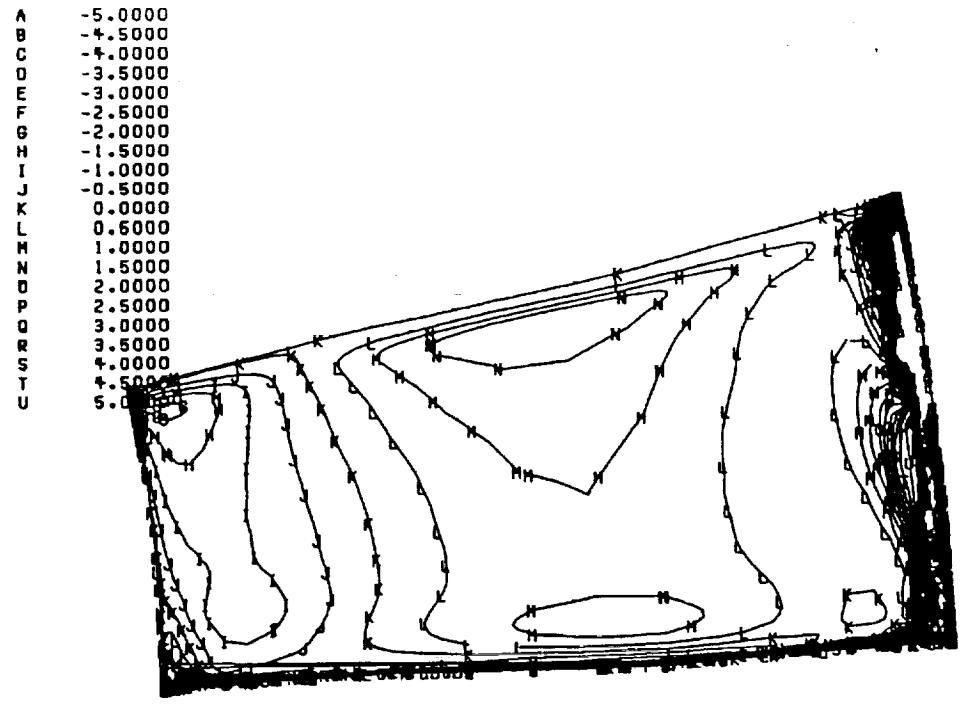


(g) Station 8.

Figure 25.—Concluded.



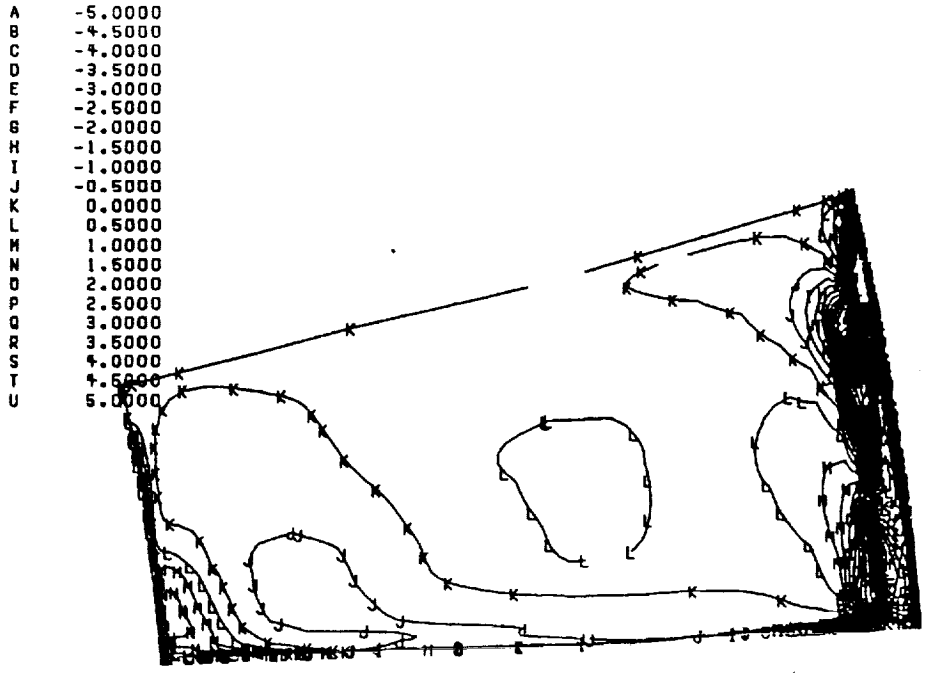
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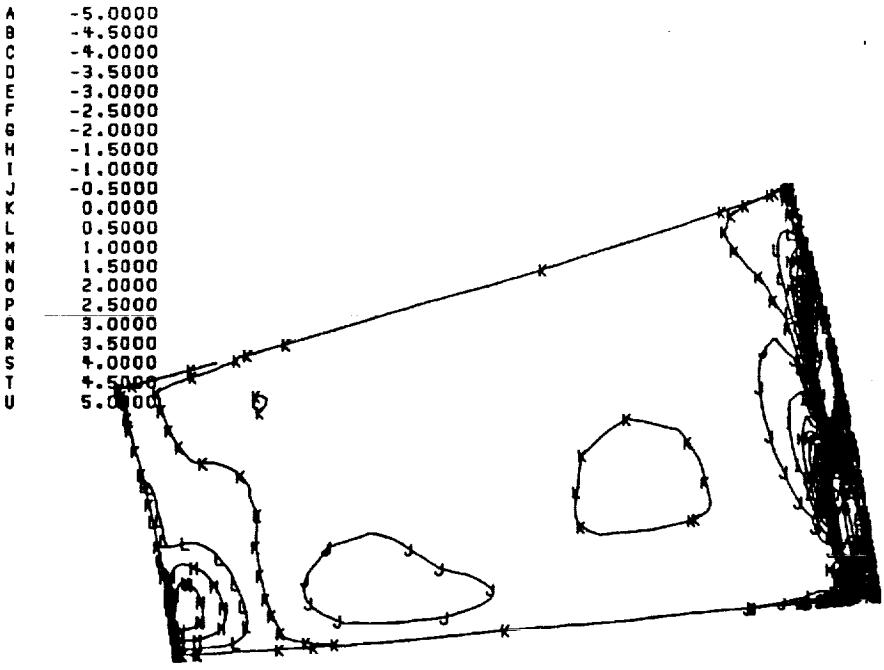
(b) Station 3.

Figure 26.—Measured differences between relative flow angles.

C-3

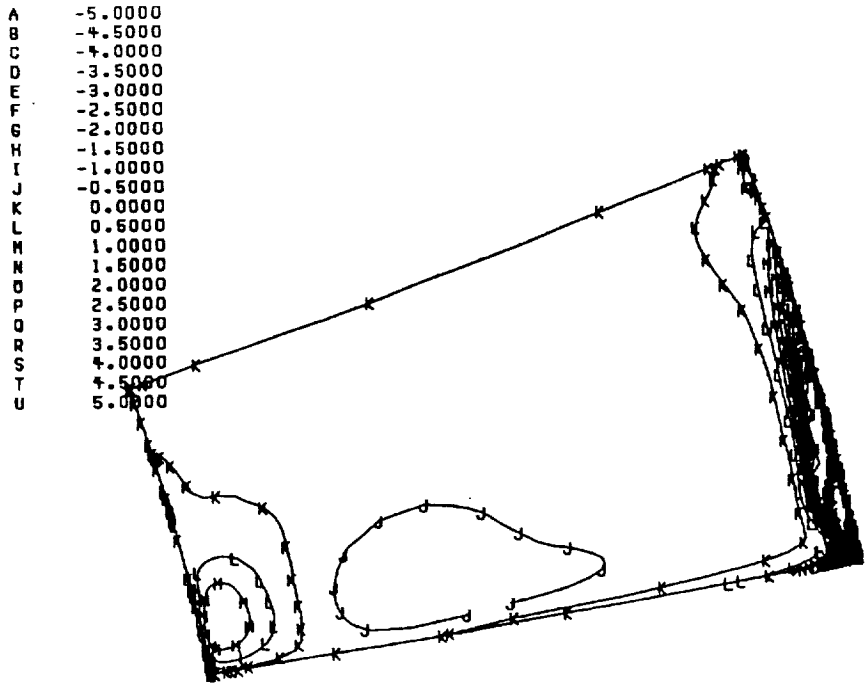


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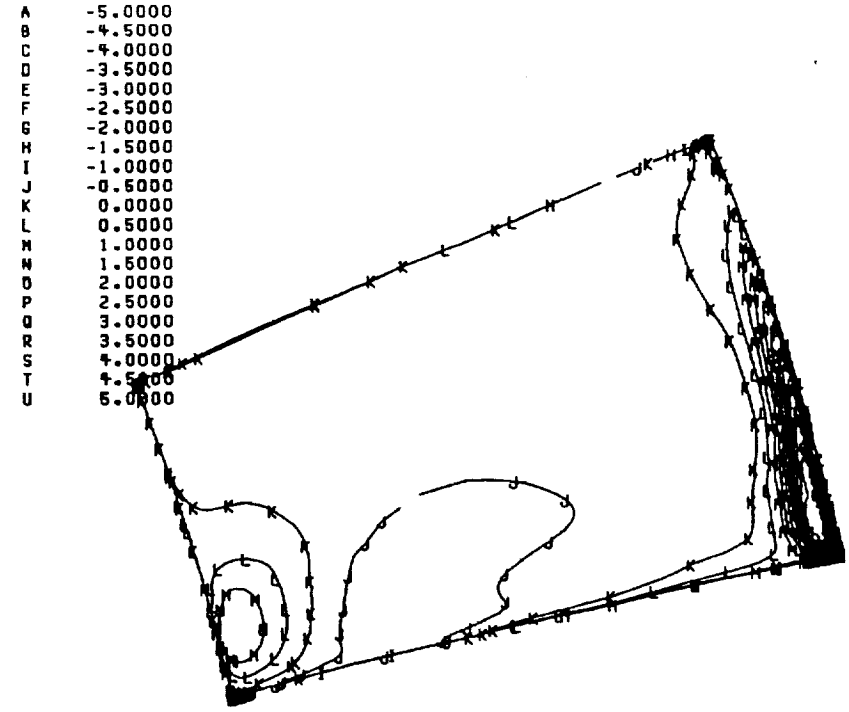


(d) Station 5.

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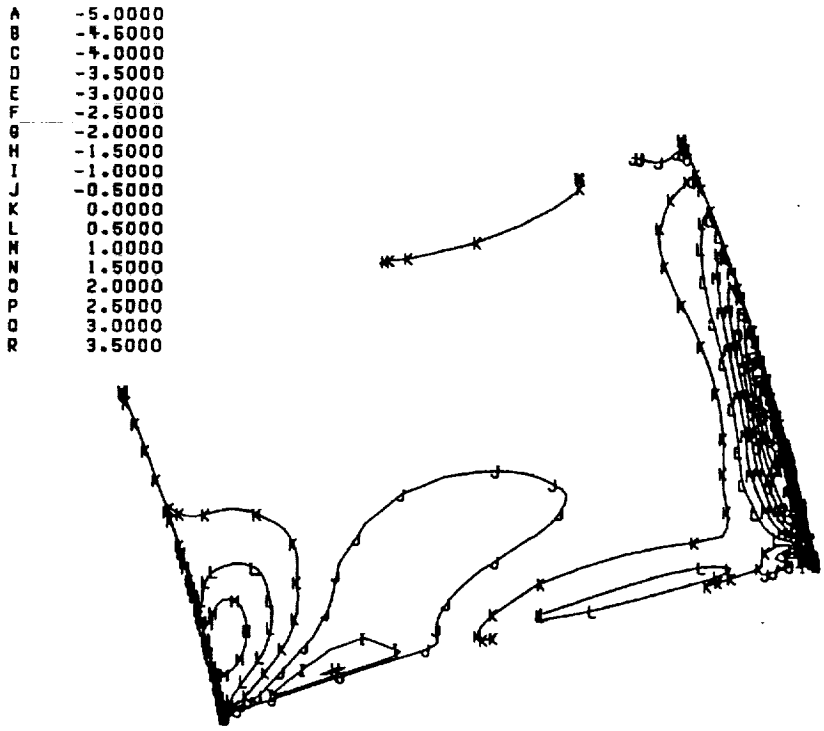


(e) Station 6.



(f) Station 7.

Figure 26.—Continued.



(g) Station 8.

Figure 26.—Concluded.

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13. ABSTRACT *(Maximum 200 words)*

Detailed flow measurements were taken inside an isolated axial compressor rotor operating subsonically near peak efficiency. These Laser Anemometer measurements were made with two inlet velocity profiles. One profile consisted of an unmodified baseline flow, and the second profile was distorted by placing axisymmetric screens on the hub and shroud well upstream of the rotor. A detailed comparison in the rotor relative reference frame between a Navier-Stokes solver and the measured experimental results showed good agreement between the predicted and measured flows. A primary flow is defined in the rotor and deviations from this primary flow for each inlet flow condition are identified. A comparison between the two flow deviations and the computed predictions is made to assess the development of a passage vortex due to the distortion of the inlet flow. Computed predictions indicate that a distorted inlet profile has a minimal effect on the development of the flow in the rotor passage and the resulting passage vortex.

14. SUBJECT TERMS

Laser anemometer; Inlet distortion; Secondary flows

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